

The Mining Journal

AND COMMERCIAL GAZETTE.

No. 20. Vol. 2.

LONDON, SATURDAY, JANUARY 9, 1836.

Price 7d.

SALE.—At the Office of CHARLES MANN, Stock and Share Broker, 7, Old Broad-street.
In several of the best Mining Companies of Cornwall that are now dividing.

NEW BRUNSWICK AND NOVA SCOTIA LAND COMPANY.
The Court of Directors of the New Brunswick and Nova Scotia Land Company hereby give notice, that they have made a call of £3 per Centum on the Capital Stock of the above Company, and the Stockholders are hereby required to pay the same on or before Saturday, the 16th day of January next, in the account of the said Company, either to Messrs. Williams, Deacon, Bankers, Birch-lane, London; or to Messrs. Wright and Co., Bankers, Cannon-street, London.
By Order of the Court,
WILLIAM AGGAS.

QUITABLE DISCOUNT SOCIETY, established pursuant to Act of Parliament, 3d and 4th Wm. IV., c. 98. Office, (pro tem.), 37, Marlborough-street, Regent-street.
Capital £100,000, with power of increase to a million, in £100 Shares.
Banks—The London and Westminster Bank, 9, Waterloo-place.
Notice is hereby given, that Thursday, the 24th inst., is the last day for receiving applications for shares, until which time they may be obtained on payment of the £10 at the office as above, between the hours of 10 and 4; or at the bankers' on the 27, 1835.
By order, HENRY C. WINGFIELD, Sec.

REVORGUS SILVER, COPPER, AND MINING COMPANY.
The Directors hereby give notice of a CALL upon the Shareholders of 10s. per share, to be paid at Sir Charles Price, Bart., and Co.'s, King William-street, London, on or before the 23rd day of January next, or the shares are liable to forfeiture according to the terms and conditions of the Company. It is necessary for the bankers' receipt, together with the scrip certificates, to be left at the office for two days, that the payment may be duly certified.—1, Prince-lane, Chancery-lane, 22d December, 1835.
The highly satisfactory Reports from the Mines may be inspected at the office.

MOUNTS BAY SILVER-LEAD, COPPER, AND TIN MINES,
In CORNWALL.
APPLICATIONS for SHARES in this COMPANY, addressed to C. R. ROBERTS, Secretary, 7, Gray's-inn-square, London, (post paid) Prospectuses may be had.

THE DURHAM SOUTH-WEST JUNCTION RAILWAY.—Capital £50,000, in 1000 Shares of 50s. each. Deposit 5s. per Share.
PROVISIONAL COMMITTEE.
Capt. J. K. Purbes, John Prince Esq.
Henry G. Key Esq., F. S. Stokes Esq.
John Labouchere Esq., Thomas Wilson Esq.
E. M. Noble Esq.
With power to add to their Number. Committee in the North to be hereafter named.
Banks—The Darlington Joint Stock Banking Company.—Messrs. Williams, Deacon, and Co. London.
Engineer—
Solicitor—Thomas Weldon Esq., Barnard Castle.
Parliamentary Agents—Messrs. Jones and Walmley.
N.B. A great portion of the shares being already subscribed for, applications for remainder must be made as above, on or before Wednesday, the 13th instant, to George Child, Esq., Secretary to the Clarence Railway Company, 7, Birch-lane, Whitehall.

ANTI DRY-ROT COMPANY.—KYAN'S PATENT.—10,000 Shares, 25s. each.
DIRECTORS.
Thomas Phillips Esq., Chairman.
W. R. Vigney Esq., Deputy Chairman.
Thomas Starling Benson Esq., Charles Enderby Esq.
William Borradaile Esq., Francis Mills Esq.
George Borradaile Esq., Francis Sapte Esq.
LIVERPOOL.
Charles Horsfall Esq.
BIRMINGHAM.
Francis Lloyd Esq.
Engineer—M. I. Brunel Esq.
Banks—Messrs. Vere, Sapte, and Co.
Solicitors—Messrs. Hall, Thompson, and Sewell.
Secretary (pro tem.)—Charles Terry Esq.
The indisputable testimonials given by men of the first talent and experience in the Kingdom, as to the perfect reliance that may be placed upon Kyan's process of preserving timber to resist the effect of dry rot and other decay, are so entirely satisfactory as to require no further remark.
The efficacy of the process is sufficiently established by the evidence contained in the report to the Lords of the Admiralty, and subsequently presented to, and acted by, the House of Commons; and likewise by the adoption of it by His Majesty's Government in Portsmouth Dockyard.
Extracts from minutes of evidence reported by the Commissioners appointed by the Admiralty, and presented to the House of Commons, July 9, 1835.—
"Sir R. Smirke.—"This preparation of Mr. Kyan's resists all rot." "I cannot add Sir R. Smirke."
Professor Faraday.—"These reasons, combined with a close examination of specimens shown him, make him strongly recommend it; and he would be quite willing, if there were occasion, to trust a good deal of property upon it."
"Sir John May.—"In regard to the canvass, four prepared pieces were not affected with mildew; three unprepared pieces were affected with it, and one of them was quite rotten."
By the use of this process British American timber will be rendered equally as valuable as timber from the Baltic, and thus the produce of British Colonies will be encouraged in preference to timber of foreign growth.
It is found that timber cut down while in a state of active vegetation, with the growing becomes, by the application of this process, immediately fit for use—thus rendering every species of domestic timber of the same value and as valuable as the best foreign for all purposes incidental to farming and husbandry;—and, by the use of the most common woods, economy will be combined with durability, and the agricultural interest will derive incalculable advantages.
These facts having been proved in the most satisfactory manner, it is proposed that a Company be formed, under a licence from the patentees, the consideration of which has been agreed upon, and the above gentlemen have been named to carry that object into effect.
Applications for shares to be made, post paid, to the Secretary, at the office of the Company, 2, Lime-street-Square, Leadenhall-street, London, where prospectuses may be had, for the further particulars obtained.
No applications for shares can be received after the 20th of January, as the Directors will appropriate the shares on Thursday, the 21st of January.

SOUTHEAST RAILWAY, in continuation of the Blackwall Railway.—Capital £300,000, divided into 6,000 shares of £50 each: deposit of £5 10s. per share.
This line is adopted with the view of continuing the London and Blackwall railway as an inlet into the metropolis through Barking, Dagenham, Rainham, Ray's, Hole-Haven, Leigh, to Southend, with branches to Ilford, Purfleet, Romford, Tilbury Fort, Mucking, Rochford, and other trading places on the line of road. The distance by land to Southend is 44 miles, by the railway it will be 34, thereby saving 10 miles.
The objects of this railway are not founded upon speculation, but upon the intercourse that already exists between the trading towns on the line, and for improving the very fertile county of Essex.
Applications for shares and prospectuses, stating fully the objects of the undertaking, to be made to the bankers, Messrs. Ladbroke, Kingscote, and Co., Bank-buildings, to Messrs. Sparrow and Co., Bankers, Chancery-lane; James Lambert Esq., Barking; to the solicitor, Thomas Brown Esq., 11, Mark-lane, Fenchurch-street; Messrs. Comber and Kayvet, Solicitors, Rochford; or to the Secretary, at the Railway-office, 11, Mark-lane, which will be submitted to the Directors for their approbation and allotment.
Railway office, 11, Mark-lane. G. COLE, Sec.

WEST WHEEL BROTHERS.
NO further Applications for Shares in the above Mine can be received after this date, and bankers' receipts may be exchanged for scrip certificates, at the office, as under, after the 16th instant, where also prospectuses and further particulars of the Mine may be had.
J. RAWDEN, Secretary.
5, Broad-street Buildings, Jan. 6, 1836.

ROYAL COBRE MINING ASSOCIATION.
23d December 1835.
NOTICE is hereby given, that all holders of Shares in the above Company, who shall have paid up their instalments then due, may receive a Dividend of Thirty-two Shillings per Share, on application at the house of Sir James Esdaile & Co., Lombard-street, on and after the 25th day of January next, between the hours of twelve and two.
By order of the Court of Directors, W. LEECH, Sec.

CORNWALL.—CAUTION TO MINERS AND MINE ADVENTURERS.

WHEREAS the Duke of Buckingham and Chandos is the SOLE PROPRIETOR of the MINERALS in and throughout the Manor of St. Perran, commonly called "the CHURCH LANDS," within which are CARN-KIEFS, THE SANDS, GEAR, &c., situate in the Parish of Perfanabuloe, I hereby caution all persons from negotiating with, or accepting any licence or sett from, any other person than myself, or such other as may be duly deputed by the said Duke. And I further caution all persons from interfering with, or working any Mine or Mines within any part of the said Manor, without having first obtained legal permission from me, or such other person as aforesaid.
St. Mawes, Jan. 4, 1836. T. DALRY JAGO.

NORTHERN and EASTERN RAILWAY, according to the PLANS laid down by James Walker, Esq.

LONDON COMMITTEE.
The Earl of Euston, M.P. Suffolk
Sir J. Astley, Bart., M.P. Norfolk
R. Angerstein, Esq., M.P. London
R. Aldin, Esq., M.P. Hertford
R. Gardiner, Esq., M.P. Hertford
Sir H. Bodingfield, Bart. Norfolk
Sir T. B. Beevor, Bart. Norfolk
J. Bagehaw, Esq., M.P. London
Sir W. J. H. B. Folkes, Bart., M.P. Norfolk
Col. Sir R. J. Harvey, C.B.K.T.S. Norfolk
Charles Johnston, Esq. Hertford
The Committee feel it due to the subscribers to the undertaking, and to the public who take an interest in it, to inform them that the Parliamentary plans and sections have been deposited with all the Clerks of the Peace along the line, and now lie for inspection at the office of the Company. The Committee are happy to inform the subscribers, that the returns of traffic made from actual examination upon the spot, show a much larger income than they had calculated on. The valuation of the farming land on the line by Messrs. Driver, and of the building land by Mr. Hardwick, is in progress, and the application to Parliament for a bill will be made immediately on its meeting on the 4th of February.
JAMES WALKER, Esq., Secretary.

CORNWALL.

TO BE SOLD by private Contract, the Fee Simple and Inheritance of and in all that CAPITAL BARTON and FARM, comprising two Tenements called Tregone and Little Boddicks, situate in the several Parishes of Alton and St. Clether, in the County of Cornwall, now and for many years last past in the occupation of Mr. Richard Northey, consisting of a convenient Farm House, with Barns, Stables, and other suitable Outbuildings; about 120 Acres of Arable, Meadow, and Pasture Land, and about 180 Acres of Common and Marsh Grounds affording a most desirable Pasture for Sheep. The Premises are held on Lease, by Mr. Northey, for a term of 14 years from Michaelmas, 1835, at the clear rack rent of 186s. per annum; have lately undergone a thorough repair, and are well supplied with water, and possess the advantages of good roads, excellent markets, and great facilities of communication with all parts of the Kingdom, being only about one mile from Five Lanes through which the mail and other coaches pass daily, and within convenient distances of Looe and other market towns, and in all probability the great Bodmin and Wadebridge Rail Road will be extended to its immediate neighbourhood. This property offers great inducements to gentlemen of capital, as affording an opportunity for safe investment, and more especially to gentlemen disposed to embark in mining speculations, as there are several Lodes of Tin, Copper, Manganese, and other metals intersecting and running through the lands; and a stream which has lately been commenced by a most respectable company of adventurers, which, from discoveries already made, promises considerable profit to the proprietor, who will part with the whole or a moiety of the minerals as may be most agreeable to a purchaser. For a view of the property apply to the tenant, and for further information to Mr. Thomas Rogers, Solicitor, Helston, Cornwall.—Dated 24th Dec. 1835.—M.B. All Letters must be post paid.

THE PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY OF LONDON, for the Year 1835, Part II. containing the following Papers:—

—Sir Charles Bell's continuation of the Paper on the Relations between the Nerves of Motion and of Sensation, and the Brain; and more particularly on the Structure of the Medulla oblongata and the Spinal Marrow. By Prof. Faraday's Tenth Series of Experimental Researches in Electricity. By Mr. Lubbock, Discussions of Time-observations made at Liverpool. By Mr. Edward Gough's Remarks on the difficulty of distinguishing certain classes of Crustacea. By Mr. J. O. Westwood, on the supposed existence of Metamorphoses in the Crustacea. 6. Rev. J. Farquharson, on the Ice, formed under peculiar circumstances, at the bottom of running Water. 7. Dr. W. Stevens's observations on the Theory of Respiration. 8. Mr. J. V. Thompson, discovery of the Metamorphosis in the second type of Crinoids, viz. the Lepidodermis, completing the Natural History of these singular Animals, and confirming their affinity with the Crustacea. 9. Mr. J. V. Thompson, on the Double Metamorphosis in the Decapod Crustacea, exemplified in Cancer Menas, Linn. Meteorological Journal, January to June 1835.
Published by the Royal Society, and sold by Richard Taylor, Red Lion-court, Fleet-street, where also may be had:—
Abstracts of the Papers Printed in the Philosophical Transactions, 2 vols. 8vo. 15s.; or 2 vols. 4to. 36s.

WHEAL FAI MOUTH CONSOLIDATED MINING COMPANY.

Capital £20,000, in 10,000 Shares, of 2s. each.—Deposit £1 per Share.
PROVISIONAL COMMITTEE.
Messrs. Vice, Baynard, and Treloar.
With power to add to their number.
BANKERS.
LONDON—Sir R. Carr Glyn, Halifax, Mills, and Co.
TRURO—Messrs. Mayor, Turner, and Magor.
The Sets belonging to this Company lie east, and adjoining the Consolidated Mines, in Gwennap.
A Prospectus, setting forth the particulars of the Sets, and the regulations by which the Company is to be governed, will be shortly issued.
Applications for Shares to be made to the Committee as above, or to Mr. T. TRAIL, of Chevalier, near Truro.
Truro, Dec. 31, 1835.

LANDED AND MINING INTERESTS.

AT A GENERAL MEETING OF LANDOWNERS, MINERS, and others concerned, held at the Hotel, Truro, December 29, 1835.
It was Resolved,
That the humble and grateful thanks of this meeting be presented to His Majesty the King, for the letter now read, as received by the Earl of Falmouth from the Commissioners for managing the affairs of the Duchy of Cornwall, and for the intimation therein conveyed, that as an act of grace towards those who had appealed to His Majesty in their Memorial, presented by Lord Falmouth, and relating to claims made by certain lessees of the Duchy Minerals, His Majesty will be graciously pleased to give His Royal Assent to the passing of an Act through Parliament placing the Duchy upon the same footing in regard to the limitation of time as that in which the town was placed by the Nullum Tempus Act, passed in the reign of King George the Third.
That the foregoing resolution be transmitted by the Chairman to the Commissioners for managing the affairs of the Duchy, in order that the earliest opportunity may be taken for laying it before His Majesty the King, and that an humble Address, in accordance with the same, be presented to His Majesty, by the Earl of Falmouth in person, at his earliest convenience.
FALMOUTH, Chairman.

THE DIRECTORS OF THE ESSEX MARINE SALT COMPANY

beg to acquaint the Shareholders that a DIVIDEND of 7s. per cent. will be PAID on the two instalments of 3s. each per share, at the Company's office, on January 9, 1836, between the hours of 11 and 4; and the shareholders are requested to leave their shares and instalment receipts three days previously for examination.
By order of the Directors,
Wm. STU. AMIES, Secretary.
Essex Marine Salt Office, 11, Abchurch-lane, Jan. 1, 1836.

SOUTH DURHAM RAILWAY.—Capital £150,000, in shares of 50s. each.—Deposit 10s. per share.

DIRECTORS.
G. H. WILKINSON, Esq. Harpur-park, Chairman.
Wm. Russell Esq., Brancroft Castle.
R. E. D. Shalloo Esq., Whitworth Park.
Colonel Mills, Widdowson.
Thomas Greenwell Esq., Durham.
Wm. Mills Esq., Durham.
Banks—Messrs. Williams, Deacon, and Co. London; Sir M. W. Ridley, Bart., and Co. Durham; the Joint Stock Banking Company, Darlington.
The necessary notices have been given, the plan, sections, and book of reference have been lodged, and application will be made in the ensuing session for an Act. The sources of profit show a return of rather more than 15 per cent. upon the most careful calculations, which are borne out by the testimony of the most able engineers.
Applications for the shares, and for prospectuses, with plans, showing fully the great advantages of the undertaking, to be made at the Railway office, 11, Mark-lane.

MEMORIAL OF LORD DE DUNSTANVILLE.

Subscriptions already advertised, £3,567 17s.
Sir R. H. Vivian, Bart., for the fund, 50s., for the Monument, 50s. 100 0 0
Mr. Tobias Lanyon 10 0 0
Mr. Edward Lanyon 10 0 0
Mr. Thomas Hutchinson, for the fund, 2 2 0
Capt. Joseph Vivian, ditto 2 2 0
W. Mitchell, ditto 10 0 0
James Lanyon, ditto 10 0 0
H. A. Vivian, ditto 10 0 0
John Dunkin, ditto 10 0 0
Wm. Thomas, ditto 10 0 0
Mr. Lewis Newton, Jan. 1 0 0
Mr. Lewis Newton, Jan. 1 0 0
Mr. R. W. Vivian 10 0 0
North and South Hesketh 10 0 0
H. P. Andrew, Esq. (omitted last week) 10 0 0
Mrs. Mary Basset, for the fund 10 0 0
J. S. Sewell, Esq., for the Monument 101 0 0
Sir R. R. Vyvyan, Bart. 100 0 0
Jas. Wentworth Buller, Esq. 50 0 0
Mr. William Holman 2 0 0
Rev. S. J. Trist 3 0 0
Rev. J. Medley 1 0 0
£3,567 17s. 6d.

FAMILY ENDOWMENT SOCIETY, for granting, at or after the time of Marriage, ENDOWMENTS to the CHILDREN who may issue therefrom.

Office (temporary), 33, Great Winchester-street.
CAPITAL, £500,000.
TRUSTEES.
Pascoe St. Leger Grenfell, Esq. Martin Tucker Smith, Esq.
Henry Forcher, Esq.
DIRECTORS.
Henry George Ward, Esq., M.P., Chairman.
George Alfred Mossett, Esq., Deputy Chairman.
William Butterworth Bailey, Esq. Edward Lee, Esq.
John Fuller, Esq. Major John Luard.
Pascoe St. Leger Grenfell, Esq. Thomas Willis Mossett, Esq.
Auditors—Bazett Colvin, Esq.; Riversdale William Grenfell, Esq.
William Sharman Crawford, Esq., M.P.
Banks—Sir James Esdaile and Co.
Physician—Dr. Roget, F.R.S.
Surgeon—Edward Cook, Esq.
Solicitors—Messrs. Lacy and Bridges.
This Society undertakes to pay to all the future children of any given marriage (from the eldest to the youngest) 100s. each, or any smaller or larger sum agreed upon, on their severally attaining a specified age (such, for instance, as 14 or 21 years of age), on condition of receiving a present sum of money, or an annual premium, payable during any number of years not exceeding the age of endowment, and dependent upon the life of one or both parents, at their option.
Table for 14 Years.
Age of the Husband. Age of the Wife. Annual Premium, to cease at Husband's Death, or after the 14th Payment.
If this premium be paid for 14 years, each child will be entitled to receive 100s. on completing its 14th year. But if the father should die before all the premiums are paid, no further payment will be required in order to secure the Endowment.
The premiums may also be computed to cease in the event of the death of the mother, or of either of the two parents who might die first.
The premiums for endowing future boys only, or future girls only, are rather more than one half of those for all children.
The premiums payable during 20 years for endowing future children at 21 years of age, are somewhat less than two-thirds of those in the above table.
The premiums for endowing existing children are made returnable (if desired) in case they do not attain the age of endowment.
The parties endowing future children will be entitled to four-fifths of the profits, the above premiums being more than sufficient to enable the Society to fulfil its engagements.
JOHN CARRUTHER, Sec.

Table for 14 Years.

Age of the Husband.	Age of the Wife.	Annual Premium, to cease at Husband's Death, or after the 14th Payment.
34	18	18 10 10
35	21	17 8 10
31	25	16 4 3
36	30	14 7 0
43	35	13 11 0
43	40	10 15 0

The premiums may also be computed to cease in the event of the death of the mother, or of either of the two parents who might die first.
The premiums for endowing future boys only, or future girls only, are rather more than one half of those for all children.
The premiums payable during 20 years for endowing future children at 21 years of age, are somewhat less than two-thirds of those in the above table.
The premiums for endowing existing children are made returnable (if desired) in case they do not attain the age of endowment.
The parties endowing future children will be entitled to four-fifths of the profits, the above premiums being more than sufficient to enable the Society to fulfil its engagements.
JOHN CARRUTHER, Sec.

CORNWALL GREAT UNITED MINES.—6,000 shares; 50s. per share.

The Public are requested to refer to the Prospectus.
The property of this Company comprises Greenhills, Shilstone, Proper, Clannacombe, and contiguous proved and valuable mines near Callington and Liskeard. Blue Hills, embracing the continuation and the underlay of the rich Polbarna and Whale Kitts lodes in St. Agnes.
The well ascertained lodes in Crogerie, Latie, and other estates in the neighbourhood of Ruby and Gardina Mines, in the parish of Wendron.
Applications for Prospectuses and Shares are to be made to James Trower Bullock, Esq., 6, John-street, Adelphi; or to Mr. T. V. Williams, at the Office of the Company, where plans may be seen, and other particulars obtained.

BRITISH SILVER-LEAD AND COPPER MINING COMPANY.

Capital £20,000, in 10,000 Shares of 20s. each. Deposit 2s. per Share.
DIRECTORS.
W. Millett Thomas, Esq., London.
John Waller, Esq., London.
Edward Butler, Esq., London.
With power to add two Directors for Liverpool and Manchester.
London Bankers—Sir John Lubbock, Bart. and Co.
Liverpool Bankers—Northern and Central Bank of England.
Truro Bankers—Messrs. Williams and Co. (Miner's Bank).
Solicitor—Edward Tribe, Esq., 40, Great Russell-street, Bloomsbury, London.
Secretary—Mr. Henry Tribe, Esq., 10, Old Broad-street, London.
Agent for Liverpool, Manchester, and Preston—Mr. Henry Lucas, 35, Cannon-place, Liverpool.
Cashier and Purser at the Mines—P. Vyvyan Robinson, Esq., of Nansloe, Helston, Cornwall.

These Mines are situated at Trelawney, in the immediate vicinity of Portliver Harbour, in the parish of Smithway, Mount's Bay, Cornwall.

It may be asserted, without hesitation, that these Mines will prove as abundant and profitable for Silver-lead and Copper as any in the West of England, being upwards of 1000 fathoms in length on the course of the lodes, and 470 fathoms in breadth, with twelve shafts ready for working, one of which is 60 fathoms in depth below the adit level.
The lodes which they contain, having been satisfactorily traced, are of the largest size and of the productive character.
The Penton lode is said by Bon-Lass, in his "Natural History of Cornwall," published 1784, page 210, to have been wrought upwards of 200 years, and as late as 1830, when the work was suspended on account of the low price of lead (3s. per ton of 35 cwt.) and the heavy duty, (one-twelfth paid to the Lord of the Manor), the vein of lead produced, in many instances, as much as 11 tons of ore per fathom, leaving at the bottom of the shaft a very rich course of lead ore for future workings. The price of lead is now 18s. 6d. per ton of 20 cwt., and the assay of ore from these Mines is from 30 to 50 ounces of Silver in the ton. The Whole Public and Treasures Copper lodes, which traverse these Mines greatly enhance their value; the latter lode, Trevelar, is now realising a large profit, at a short distance from the British Silver Lead Mines.
There is a large quantity of the whole ground, above 60 fathoms level, which can be immediately opened with great facility and profit.
The tenure of the chief part is a 31 years lease from November last, paying to the Lord of the Manor, the Rev. Canon Rogers, one-twenty fourth dues, till such time as the outlay for costs be repaid to the Company by the sale of produce, and then one twentieth permanently, free of all parochial and other rates and local taxes; a few inclosures on the estate are held for a similar term from Mr. James, at one-fiftieth net dues.
It is intended to erect forthwith two pumping engines, one of 36 inches, and the other of 40 inches cylinder; also a grinding engine, and a steam whin.

REGULATIONS.

The Capital of the Company is to be £20,000, in 10,000 shares of 20s. each.
The first instalment of 2s. per share to be paid to either of the bankers by the time fixed in the letter of appropriation.
No further instalment will be called for without one month's notice, and not to exceed 10s. per share.
Two hundred shares to be the qualification of a director.
The shares will be to be issued signed by two directors and the secretary. A register will be kept to record to whom the shares are first issued, and for transfers, if required by the holders.
The original reports from the mines, together with the books of the Company, will always be open for the inspection of the shareholders.
That all the contracts for purchases by the Company be for ready money to be paid by the shareholders from any liability beyond the amount of the shares subscribed paid up.
A General Meeting of the shareholders to be held in London or Liverpool, in the month of April in each year, commencing in 1837, at which a full report of the Company will be submitted, with a statement of the accounts.
That at all meetings of shareholders a proprietor of 5 shares, and less than 10, shall have 1 vote; of 10 shares and less than 20, 2 votes; of 20, and less than 30, 3 votes; of 30, and less than 40, 4 votes; of 40, and less than 50, 5 votes; and of 50 shares and upwards, 6 votes.
An assignment of the shares of the mines is made to the directors by the Company.
Applications for shares to be made to the Secretary or Agent, Office, 55, Old Broad-street, London, January, 1836.

RAILWAYS.

In accordance with our promise we this week return to the subject of Railways; and in compliance with the wishes of many subscribers, we direct our attention to the gradients of the different lines. We select for our present number those of the three proposed lines to Brighton.

THE BRIGHTON RAILWAYS.

Gradients of such portions of the Lines as are understood to be finally adopted.

FALMER'S LINE.—Croydon to Dover, by way of Marden and Oxted—the Brighton portion of this line being abandoned or suspended.

Ms. Chs.	feet. in.	feet. out.	feet. level.
43	rises 9	3 per mile or 1 in 567	
12	rises 34	6 do. or 1 in 152	
60	rises 52	0 do. or 1 in 100	
15	rises 34	6 do. or 1 in 153	
55	rises 16	0 do. or 1 in 330	
1	rises 15	6 do. or 1 in 342	
68	falls 16	2 do. or 1 in 325	
52	falls 52	0 do. or 1 in 102	
0	falls 16	9 do. or 1 in 320	
0	falls 10	2 do. or 1 in 528	
0	falls 2	0 do. or 1 in 2640	
40	rises 8	0 do. or 1 in 660	
40	falls 16	9 do. or 1 in 320	
0	falls 5	0 do. or 1 in 1056	
0	falls 2	9 do. or 1 in 1920	
0	falls 3	0 do. or 1 in 1426	
0	level		
0	rises 9	1 do. or 1 in 587	
65	falls 2	6 do. or 1 in 2112	
40	rises 16	0 do. or 1 in 330	
40	rises 14	0 do. or 1 in 380	
42	falls 55	9 do. or 1 in 94	
62	falls 17	0 do. or 1 in 310	
54	level		
76	falls 32	0 do. or 1 in 160	

0 45
11 0 Add from Tooley Street to Croydon, by the Greenwich and Croydon Railways.
0 0 Total distance from Tooley Street to Dover.

Summary of the above Gradients.

Ms. Chs.	Level or equivalent to level (upon which the locomotive engines will exert their full force) the rise per mile not exceeding 5 feet.
39	Inclination of 14 to 17 feet per mile, in ascending which the engines lose about 40 per cent of their velocity.
66	Inclination of 8 to 10 feet per mile, a loss in the ascent of about 23 per cent. of the velocity.
23	Inclination of 33 to 35 feet per mile.
74	Ditto of 52 to 56 feet per mile.

0 45
* Tunnel 22½ chains under the old London Road.
† Arch of 34 feet over the London Road.
‡ Independently of the rise of the country between Tooley Street and Croydon, this line ascends 214 feet more in the first 7½ miles after Croydon. The total summit therefore which it has to surmount between Tooley Street and Marden Park, is about 340 feet.
§ Tunnel 1 mile, 42½ chains.
|| Groadham Green.
Quay at Dover.

MR. BIDDER'S OR STEPHENSON'S LINE.—From Nine Elms near Vauxhall, thence by way of the Southampton Railway, continuing by way of Dorking, Capel, Horsham and Shoreham.

Ms. Chs.	feet. in.	feet. out.	feet. level.
5	0 rises 8	0 per mile or 1 in 660	
1	16	level	
3	78 rises 15	10 do. or 1 in 338	
0	40	level	
2	72 rises 12	9 do. or 1 in 414	
1	51 rises 8	0 do. or 1 in 662	
2	14 falls 14	0 do. or 1 in 383	
7	29 rises 15	10 do. or 1 in 338	
0	77 falls 9	3 do. or 1 in 568	
1	14 falls 10	3 do. or 1 in 514	
6	66 falls 12	10 do. or 1 in 405	
1	12 rises 4	4 do. or 1 in 1221	
7	54 falls 16	0 do. or 1 in 332	
2	23 falls 4	10 do. or 1 in 1089	
0	79	level	
1	31 rises 8	9 do. or 1 in 608	
0	16	level	
1	14 falls 5	1 do. or 1 in 1034	
2	48 falls 1	1 do. or 1 in 4587	
3	76 rises 11	1 do. or 1 in 473	

55 9 Length of this line of Railway from Nine Elms to Brighton.

Summary of the above Gradients.

Ms. Chs.	Level or equivalent to level, upon which the locomotive engines will exert their full power the rise per mile not exceeding 5 feet.
10	Inclination of 8 to 11 feet per mile, in ascending which the engines lose about 23 per cent of their velocity.
9	Inclination of 12 to 16 feet per mile, in ascending which, the engines lose from 30 to 40 per cent of their velocity.

* The summit of this line appears to be about 240 feet, and is reached in 24½ miles from Nine Elms, out of which distance about 14½ miles rise on the average more than 13 feet 6 inches per mile. This line must therefore be worked either by assistant engines throughout, or if by a single engine, it must be of greater weight and power.
† Brighton.

N.B. 80 chains, of 22 yards each, make 1 mile.

MR. GIBBS' LINE.—From Croydon to Mersham, Red Hill, Capel Horsham, and Shoreham, to Brighton.

Ms. Chs.	feet. in.	feet. out.	feet. level.
0	30	level.	
2	40 rises 52	0 per mile or 1 in 100	
3	0 rises 5	0 do. or 1 in 1056	
1	60	level. tunnel at Mersham.	
3	40 falls 28	0 per mile or 1 in 188	
2	60	level.	
6	60 rises 4	9 per mile or 1 in 1078	
1	75 falls 43	0 do. or 1 in 120	
5	0	level. tunnel of 60 chains.	
2	36 falls 38	4 per mile or 1 in 139	
5	40	4 6 do. or 1 in 1200	
9	0	2 4 do. or 1 in 2200	
2	5 rises 5	6 do. or 1 in 960	

46 46
11 0 Add from Tooley Street to Croydon, by the Greenwich and Croydon Railways.
57 46 Total length of this railway from Tooley Street to Brighton.

Summary of the above Gradients.

Ms. Chs.	Level, or equivalent to level, upon which the locomotive engines will exert their full power, the rise per mile not exceeding 5 feet 6 inches.
36	Inclination of 25 feet per mile, upon which the engine loses so much power that an assistant engine must be used.
6	71 inclination of 38 to 52 feet per mile, upon which an assistant engine must be constantly used.

* The summit of this line above Croydon appears to be 145 ft., and is reached mainly by one inclined plane of 2½ miles (rising 52 ft. per mile) shortly after leaving Croydon. The summit is at Mersham. In returning from Brighton, the total rise from the beach at Hove to the Mersham summit (39 miles) is 290 feet, which, as on the journey down, is surmounted by short planes, inclining from 38 to 43 feet per mile, as on the Liverpool and Manchester and Great Western Railway. The first summit on this line is, of course, the town of Croydon, which is about 135 or 140 feet above the Greenwich Road.
† Brighton.

THE BRIGHTON RAILWAYS.

[With a view of effecting an union between the two Shoreham Lines to Brighton, and of avoiding the expenses of a parliamentary contest, the following letter has been addressed to the Committee of Mr. Bidder's or Stephenson's Line, by the Committee of Gibbs' Line.]

To the Chairman of the London and Brighton Railway.

The Line surveyed by Mr. Bidder.

SIR,—I am requested by the provisional Directors of the line of Brighton Railway surveyed by Mr. Gibbs, to inform you that several interviews have taken place between themselves and the Directors of the South Eastern Railway Company, and that although no arrangement for junction has been concluded between the two companies, it is understood that the latter have resolved to confine their application to Parliament in the ensuing session to the Dover portion of their line. The application previously intended to be made by the South Eastern Company for a line from Oxted to Brighton will therefore very probably be suspended for the present. The question of revival will be determined by the success or failure of the joint or separate application to Parliament for the lines of railway represented by your Board and ourselves; and we apprehend that the Directors of the South Eastern Railway Company are, upon the whole, confident that the expected contest in Parliament between our lines will terminate in the defeat of both, and that they will thus be enabled to renew their application. Calculating upon the exhaustion of the means of our companies during the present year, they expect to succeed in the session of 1837. Under these circumstances, and impelled by the duty of endeavouring, in the interest of the shareholders of both companies, to effect an arrangement with your Board, by which a parliamentary contest may be avoided, I am requested to propose that committees of your line of railway and our's, consisting of two or three members of each Board, should meet on some early occasion—not later than the 9th instant (by a day's previous notice from you), in order, if possible, to devise some measures for a coalition between the two companies, and thus to unite the means and efforts of both in the prosecution of a common object, viz., that of procuring an Act of Parliament, the success of which will in all probability be much endangered if a collision take place; while, on the other hand, it appears highly probable that a Bill may be carried through Parliament if the two companies remaining this year can be united previously to the commencement of the session. Whatever may be the ultimate decision of the proposed meeting, whether to unite or not, we feel persuaded that your Board, as well as our's, believe, that in the projected formation of a line of railway to Brighton the considerations may be stated as follows, viz.:—1.—That no district has been surveyed with so much perseverance, and in so many directions, in order to find the best railway line, as the country between London and Brighton. 2.—That it may be considered that one of what are called "the western lines" will be preferred, because the difficulties presented by the nature of the country between London and the southern coast are least by those routes, the greater length being compensated by easier inclinations of the ground, and by the greater speed of the journey, &c. &c. 3.—That in any application to Parliament for a line of Railway to Brighton, it is especially desirable, if not indispensable, to consult public opinion and the wishes and feelings of the landed proprietors; and that such a line of country should therefore be selected as will interfere in the smallest possible degree with the highly ornamental properties for which the county of Surrey is so much distinguished, and to the privacy of which the residents are so remarkably and justly attached. 4.—That the interests of that portion of the public which now visit, and of the incalculably greater portion which will visit the southern coast, must be fully consulted in the formation of the railway, that the Brighton Railway must have two termini at London; and that it must, in fact, afford to the traveller the choice of being conveyed either to the city or to the west end of the metropolis, as the coaches travelling on the turnpike roads now do. As the plan of your railway offers one terminus only, viz., the western, at Nine Elms, which is at some distance from Vauxhall bridge, it would

appear to be especially incumbent on your Board to consider whether Parliament will consent to pass an Act by which much of the traffic will be diverted from the turnpike roads to your line of railway, which offers but a single terminus at Nine Elms, and which, in communicating thus remotely with many parts of the west end of Town, cannot be considered as affording, even in that one respect, any or suitable, complete accommodation.

In proposing a meeting of the two committees, the Directors of this Company are impressed with the belief, that although the difficulties arising from various causes may be made less upon one of the western lines, and most probably upon their own than upon that selected by your Board, yet that none of the usual obstacles attendant upon carrying a Railway Bill through Parliament ought to be overlooked.

Although there are no interests connected with public works of any note on the line to Brighton to be encountered, such as canals or river communications, yet the question of principle, of the expediency in fact, of authorizing any line of railway to Brighton, may be raised against any party, and although it is evident that opposition founded on this basis will be ultimately unsuccessful, still it is clear, that union of both interests against this or any other opposition is the safest policy, and that much of the vexation, expense, and delay which will be encountered by both companies, when in collision, may be avoided by a junction.

Among all the reasons, indeed, which have been at any time deduced to prove the policy of union between two companies having the same ultimate object, the most cogent appears to be, that by union the efforts and connections of both are brought to bear upon any public opposition, which (although vexatious) may be scarcely less formidable, and which is therefore in all cases, more effectually encountered and discouraged by an union of forces against it.

If, on the contrary, the two companies approach Parliament in a state of collision, the private connections of both are not only divided, but are also frequently factiously opposed to each other; the public opposition which may probably be raised upon the ground (however futile) of principle, and expediency, and which is likely to have some force when brought to bear upon a line of country where great prejudices may exist, and where there is no experience of the benefits arising from rail-roads, gains a force precisely in proportion to the weakness of the applicants, and the result to these companies, as in many similar instances of impolitic collision, may very possibly be failure in the object, accompanied by much anxiety and loss of time, and by a waste of means exactly regulated by the duration and obstinacy of the contest.

With regard to the interests of the shareholders by which the directors of both companies are, without doubt, equally animated, they are obviously as follows: That the prospect of obtaining the sanction of Parliament should be secured, if possible, in the ensuing session, by a coalition, instead of being postponed, and therefore lost by division. That the expenses necessarily incurred, should be as moderate as possible, instead of being augmented incalculably by a collision of the parties. That a line of country be selected for the railway, which shall unite all the advantages practicable for a railroad between London and Brighton, worked by locomotive engines, together with all possible economy in the outlay of capital; and that these objects, and the success of the application to Parliament, should be ensured as much as possible by selecting a line of country to which the owners of land have the smallest objections.

If the result of the proposed meeting between the sub-committees should prove that no arrangement can be effected; if the efforts of both parties must be submitted to the doubtful chances arising from the collision of interests which in that event must take place, the directors of this line of railway request me to assure you, that in carrying into effect the opposition to your Board (which must necessarily arise out of their efforts to carry their own object, and to which they are pledged by their own determination, by their views of ultimate success, and by the interests of shareholders entrusted by them) they will continue to follow the path of open, strenuous and persevering opposition, to which alone their habits and duties incline them. Whatever sanction may appear to be given by the practices at public elections, unfortunately too

prevalent, and which seem in some cases to have been infused into the various parties to railroad lines, the directors of this company will on no occasion descend to intrigues or misrepresentations, although intended to obstruct a rival party in the preliminary processes of surveying, and applications to landed proprietors. Practices of this kind have never been found of efficacy in the advance of a bill, or in conducting the arguments as to comparative merits before the committees of either House of Parliament.

In reviewing the amount of means at the command of the company, the directors request me to assure you that their line is supported by a most respectable array of the means required for a contest in Parliament, and that the deposits paid upon their subscribed capital are composed of moderate, but numerous contributions, from subscribers, who appear to be proportionately indifferent to the ultimate fate of their money provided it be expended in a persevering and judicious endeavour to accomplish the object proposed.

And the directors have not forgotten the assertions which have been publicly made, that the subscriptions to your line have been contributed in large amounts by persons of great wealth and respectability.

However powerful, and available in case of a union of interests between the companies, the latter undoubtedly are, the directors of this line calculate with confidence that the larger contributions made by persons of great individual means are in almost all cases accompanied, if possible, by increased care and circumspection in the use of them, and by a very proper disinclination to expend such means upon objects which, if not impracticable, may be at all events liable to strong and possibly successful objections.

I am, Sir, your obedient humble servant.

R. S. YOUNG, SECRETARY.

By order of the Directors of the London Brighton Railway, the line surveyed by Mr. Gibbs.

BIRMINGHAM AND DERBY RAILWAY.

PUBLIC MEETING AT TAMWORTH.

On the 15th ult., pursuant to a requisition to the Bailiffs of Tamworth, a respectable meeting of the inhabitants of that borough and its neighbourhood was held at the Town Hall, for the purpose of expressing their opinion of the projected railway from Birmingham to Derby, passing through Tamworth and Burton-upon-Trent. The Members for the borough, the Right Hon. Sir Robert Peel and the Right Hon. William Yates Peel, and many of the neighbouring landowners were also present; and a deputation from the Directors of the Railway Company, consisting of Henry Smith, Joseph Walker, and William Beale, Esqrs., attended from Birmingham.

In moving the first Resolution, the Right Hon. Sir R. Peel spoke to the following effect:—

This resolution, you will perceive, affirms two propositions. 1st, That the projected railway will be conducive to the general welfare of the country; and, 2dly, that it will tend to the local interests and prosperity of this town and neighbourhood. Gentlemen, you are far too enlightened to render it necessary for me to say anything as to the great utility—say, the vast importance, of having throughout the kingdom a cheap and rapid mode of communication. I do not hesitate to avow myself favourable to the principle of communication by railways; and on all occasions I shall give my cordial support to such undertakings, provided I am satisfied they will succeed as speculations, and prove a profitable investment of capital to their projectors. It is no reflection on the parties who have originated the undertaking, that their main or primary object is their own individual profit, for it is only by individual gain that the general interest is advanced; and, unless it can be proved to me that the views of profitable investment with which this undertaking is commenced will be realized, any doubts I might entertain of its success would be materially increased; for, in order that it should succeed as a general measure, it must be shown to be profitable to its promoters. I am, gentlemen, favourable to such undertakings, because I believe that our commercial interests are best promoted by a rapid communication, which will, as it were, bring together remote parts of the empire, and unite all our great commercial towns and agricultural districts. It is absolutely essential, in order to maintain our commercial superiority over the rest of the world, that the most favourable means of transit through the country should be adopted: for we are now in a perfectly different position from that in which we were during the late war. At that period nearly all the neighbouring countries were the scene of warfare, and their inhabitants were consequently precluded from competing with us in commercial pursuits. We had a maritime force, by which we commanded the seas, and hence we enjoyed a monopoly of trade and manufactures in the markets of the world. During the war which ravaged Europe from 1793 to 1815, we had a monopoly not only of the trade and commerce of Europe, but of nearly the whole of the globe. Peace happily succeeded, and has since prevailed, and other countries are now, and have been for some years past, directing their energies to the improvement and cultivation of their manufactures and internal resources; in fact, so rapid has been their progress, that they now compete with us in nearly every branch of manufacturing industry and commercial enterprise; and it is my opinion that it will be impossible to maintain our superiority, and struggle successfully against this powerful competition, unless we exert all our energies to bring into operation every improvement which skill and intelligence can devise.

We must not, gentlemen, close our eyes to the fact that railways are now being established on the Continent, and that they exist to a great extent in the United States of America. Nor can we, by any means, prevent our artisans and our capital from leaving the country, nor our machinery from being exported, if there should appear elsewhere a fairer prospect of profitable employment. I think, therefore, we are bound to encourage these undertakings in every part of England, whenever we have reasonable grounds for believing they will succeed. I cannot doubt it is for the general interest of the country that they should be established. If by a railway communication the journey from London to Birmingham can be performed in five hours instead of thirteen, thereby enabling him to go to London, transact his business, and return the same day, the great advantages arising from so rapid a communication must be obvious. Again, whatever improvement in communication, which will enable the poor man, in the present state of the poor laws, to carry his labours, perhaps, the only valuable property he possesses, to the best market, and to where it is most wanted, must be a decided advantage not only to him but to the community at large; and it is of great importance to the country—that it is, in fact, indispensably necessary to the maintenance of its present eminence and superiority, that such undertakings should be encouraged. So much for the bearing of the subject upon the general question. I shall now draw your attention more particularly to the effect of the line under discussion upon the interests of this town and neighbourhood. I hold in my hand a map, showing the line of railway from London to Birmingham, and from Birmingham to Liverpool. It comprehends also most of the large towns in the West Riding of Yorkshire, and comprises in addition, Hull, Gloucester, and the lines between these various places. Then, gentlemen, you are probably aware that a railway is now in process of execution between London and Birmingham, which will probably be completed in about three years. There is also one in execution between Liverpool and Birmingham, which will be completed in about two years. Thus acts of the legislature have already passed which will make Birmingham the centre communication between London, Liverpool, Manchester, and other great manufacturing and commercial districts. There are also bills in contemplation for other railways, which have not as yet received, but which will, in all probability, receive the sanction of the legislature in the ensuing session of Parliament. One of these, for which notice has been given, to unite Derby with Leeds, and this railway will immediately pass through, or touch upon, the following important places:—Chesterfield, with a population of 10,000; Sheffield, 91,000; Barnsley, 10,000; Huddersfield, 81,000; Halifax, 109,000; Leeds, 125,000; Wakefield, 24,000; and I am given to understand that this railway has received very general encouragement, and that there is no probability of any very considerable, and certainly of no successful, opposition to it; and we may, therefore, take it for granted that in the course of next session of Parliament, an act will be obtained for uniting Leeds with Derby by railway communication. There is also another line proposed, to unite Birmingham and Gloucester. At the close, therefore, of the next session of Parliament we shall probably stand thus:—

Besides the lines of railway from London to Liverpool through Birmingham, there will be a line between Birmingham and Gloucester, effecting a direct communication to the port of Bristol, and through it, to the West Indies. We shall also find a line connecting Derby with Leeds. Supposing this to be the case, I think, Gentlemen, under such

STANHOPE AND TYNE RAILWAY COMPANY.

circumstances, you cannot entertain a doubt, when you consider the wealth, intelligence, and commercial enterprise of the people of Yorkshire and the North, that they will, by some means or other, effect a communication with Birmingham, and its important adjacent districts, as well as lines. The question, therefore, is, in what manner that union is to be effected. The Gentlemen present, who attend from Birmingham on this occasion, propose to accomplish it by uniting Derby with Birmingham, by a railway passing through, or near Burton-upon-Trent and Tamworth. The proposal is, as I apprehend it, that the railway shall pass from Derby to Nether Whitacre, by way of Burton and Tamworth, in one continued line, and that it shall there diverge, one line leading to Birmingham, by way of Yardley, and the other uniting with the London and Birmingham railway, at or near Hampton-in-Arden. Now, Gentlemen, I presume it will be the general opinion of this meeting that to such a proposition, supposing these to be the best lines for effecting the objects contemplated, we ought to give our assent and support. It certainly appears to me, upon a cursory examination of this map, that it is by Tamworth that a line from Birmingham to Derby, should run. It is in a direct line between the two places, and not only so, but I apprehend that, on account of the valleys and the natural levels of the country, it will be found that this line can be executed at considerably less expense than any other. In all probability in regard to distance, a shorter line to London from Derby might be devised, and it is probable that other proposals will be made for connecting Derby with London by way of Nottingham and Leicester. Supposing this to be the case, it can in no way affect the line between Derby and Birmingham. There can be no doubt that the population of Yorkshire and the North, in conjunction with the other interests concerned, would insist upon a more direct communication with Birmingham and the West of England, then could be offered by way of Nottingham and Leicester. It is also to be observed that when this line reaches Nether Whitacre it arrives within seven miles and a half of the London and Birmingham railway at Hampton-in-Arden; and I have, therefore (said the Right Honourable Baronet), little doubt that a junction with it will be effected near that place. I also think that it will be a great advantage to this town and neighbourhood that such a junction should be effected, and that we should by no means limit the advantages to be gained by us from this railway to Birmingham alone, but that we ought also to have a direct communication with London. My hope is that this will be effected, and that this railway will not only connect us with Birmingham, but also with the London and Birmingham railway, by uniting with it at some point near Hampton-in-Arden.

Gentlemen, I state to you freely my belief is, that this undertaking is likely to succeed, but it would have been more satisfactory to me to have had longer time to have considered it, and to have seen the calculations upon which its success depends. I did not see the plan of this railway till about six weeks ago; and I am now speaking without any accurate details; but, arguing from a general impression, and a strong opinion I have in favour of railways generally, and looking at the great interests concerned between Leeds and Gloucester, I am inclined to think that it will succeed, and that it will meet the encouragement of Parliament; but I will reserve to myself, and I recommend you to reserve also, a final decision, until you see the calculations that are essential to it. Gentlemen, I most cordially hope this project will succeed. I shall give it my assent as a landed proprietor, and I shall support it in my place in Parliament, for it does not appear to me to be one of those speculations with which at present the newspapers so much abound. As regards the local interests of Tamworth, we have the best guarantee in the character of the gentlemen who are conducting the undertaking: they are persuaded that this is the line which will be of most advantage to Birmingham, and which can be effected at the least expense, and I confess that, what I have heard from Mr. Smith still more recommends it to me. I tell these gentlemen we feel deeply interested in the welfare and prosperity of Birmingham; it is the great metropolis near which we live, and there is nothing which can tend to produce an increased demand for Birmingham manufactures, and promote the welfare of Birmingham, which must not, at the same time, prove advantageous to us, and increase the prosperity of Tamworth. If we can establish this proposed communication with Birmingham, it will bring us within half an hour of each other, and promote the mutual good understanding and sympathy which exists.

I have now, Gentlemen, stated to you the reasons which will induce me to give my assistance to this measure, and I again repeat that it is my intention to give it my strenuous support. I do so, believing it will conduce to the prosperity of this town and neighbourhood, in which I take the deepest interest. Mr. Smith has justly remarked that Birmingham has risen to importance from its central position, and from the means of communication which it possesses with other large and important districts; and I hope the gentlemen who originated, and who will have to carry this railway into execution, will perceive that the interest we take in it, must depend upon the facilities afforded to us, in making use of it as a direct and convenient communication from this town. The advantages of railways do not consist so much in the carriage of heavy goods, as in the conveyance of passengers, and of the lighter articles of manufacture, in which they are of infinite importance. If, therefore, we are to have a railway pass through Tamworth, and the only advantage we are to derive from it, is to be the pleasure of seeing passengers comfortably travelling along it at the rate of thirty miles an hour, the benefit to us, indeed, will be but very small, not much greater than we should derive from seeing a balloon pass over our heads; therefore, when we say we are willing to support this line of railway, it is with this necessary reserve—that the originators of it shall do everything that is in their power for the benefit and convenience of this town and neighbourhood, and with the understanding that we are to have a station at Tamworth. Where it may be cannot now be determined, but I hope it will be in the most advantageous place for the inhabitants, without regard to any personal considerations. I trust a Committee will be appointed to confer with the undertakers of the measure, and after the fullest discussion and mature consideration, I hope that situation will be adopted which will give the greatest facility for convenience to the inhabitants of Tamworth, and the surrounding places.

I hope also the interests of the agriculturists of the neighbourhood will be consulted. I know we shall derive advantage from having a rapid transit to the Birmingham market, by which we can, in half an hour perhaps, deliver our provisions in that town; but these advantages will materially depend upon the facilities afforded to the farmers to get their produce upon the line of railway, and although I am aware great inconvenience would arise from a multiplication of the principal stations, I hope subordinate stations will be made on the line, for the purpose of effecting this object, without obliging the farmers to carry their produce any long distances to the station-houses. I am aware that doubts have been expressed by the agriculturists with respect to the advantages of railroads to them, but I confess I do not share in these doubts; I do not think we can do better for the agriculturists than to open for them new markets by the proposed communications with the large towns. It is thought by some there will not be so great a demand for horses, and that, consequently, a decrease in the consumption of corn will ensue. In my opinion, these apprehensions need not be entertained. The same objections were felt with respect to the canals, when they were originated, but they have proved groundless. The general prosperity of the country will be increased by railways, as it has been by canals, and, consequently, there will be a general increase of traffic, and the demand for horses will not, on the whole, be decreased; of course, on the present main lines of coach travelling, fewer coaches may be employed, but the traffic in lateral directions will be increased by the general improvement. When it was proposed in the House of Commons to have a steam-boat between London and Calais, the innkeepers on the line of road between London and Dover, feared they should be ruined, and petitioned against the measure; but every one knows that, since the establishment of steam-boats, there is a far greater traffic on that road than there was before; such will, I believe, be the case with railways. In my opinion railways will increase in number, and with them, not only the prosperity of the manufacturing, but also of the agricultural interest.

GREAT NORTHERN RAILROAD.—Great progress has been made during this last week in the survey from near Croft to York. It appears from the report of the chief engineer when at Northallerton on Saturday week, that the railroad will pass from Croft in a straight line across the Hutton Bonville estate, near to the hall, and through the old Roman encampment, near to the foot of the Castle hill, about 400 yards west of Northallerton, from thence through the estate of Samuel Crompton, Esq., M.P. at Wood end, passing near to Carltonminst, about a mile west of Thirsk, to Pilmor, thence passing Raskelf, about 1200 yards to the west, and keeping a straight line forward towards York, where it will terminate near to Micklegate bar.—*Newcastle Courier.*

In the *Mining Journal* of the 12th ult., some observations were incidentally introduced in a letter of our correspondent C. C. on the "Coal trade," on the subject of this company, stating that the shares were at a discount of 20 per cent., the accuracy of which statement we had at the time no reason to doubt. Subsequently, however, in consequence of a representation made to us that the shares had never been sold under par, such assurance having been given by gentlemen on whose veracity we had, and have every reason to believe implicit confidence is to be placed, we availed ourselves of the earliest opportunity of drawing the attention of our readers to the circumstance. This, it appears, has not been deemed satisfactory, by the parties complaining of the insertion of C. C.'s remark, one cause assigned being that the explanation did not occupy a sufficiently conspicuous situation, although introduced under "Notice to Correspondents." We therefore on the present occasion again insert our remarks; and trust, having selected a position in the paper which cannot be considered otherwise than prominent, that the parties interested will be satisfied with our having done all in our power to correct an unintentional error, assuming as we do, that the last representations made to us are correct as to the price of the shares.

We have, from personal respect to the parties, rather traversed out of the course we had laid down on the first publication of the *Mining Journal*, and which we have invariably pursued with regard to the communications of correspondents, and have now only to observe, that we shall not deem it necessary further to trespass, either on the attention of our readers, or the occupation of our columns in reverting to the subject.

The following are the observations referred to:—"Stanhope and Tyne Railway Company.—In a preceding number we inserted a letter of C. C. on the Coal Trade, in which our correspondent inserted that the shares of the company were at £20 per cent. discount; we have since been informed on good authority that such is not the case, the shares never having been under par. We have put ourselves in communication with our correspondent; but in the meantime feel it due to the company to note the circumstance."

South Durham Railway.—From the prospectus, it would appear that this undertaking holds out the prospect of the returns on the capital being more than 15l. per cent. The plan, section, and book of reference have been lodged, and it is intended that application shall be made in the ensuing session of parliament for an act. The proprietors on the line of road, we are given to understand, have given their assent to the measure, so that there is little or no chance of opposition. It is contemplated that the line will be finished, and in active operation in ten months. The result will prove the accuracy of the estimates, and the abilities of the engineer and persons employed, and we hope to congratulate them on the result being in accordance with their sanguine, and we will hope well founded expectations.

ACCIDENTS IN MINES.—THE DAVY LAMP.

[Evidence of Jonathan Pereira, Esq., Lecturer on Chemistry, &c., given before the Parliamentary Commissioners appointed to report on Accidents in Mines. This evidence will be found to corroborate that of Dr. Birkbeck, and in direct opposition to that of Mr. Buddle. From the able skill of the experimenter and his high scientific attainments, his opinions will no doubt be perused with particular interest and respect.]

What is your occupation?—I am by profession a surgeon; and have been engaged for some years in the delivery of lectures on chemistry in the medical school of the London Hospital, and in the Aldersgate School of medicine.

Has your attention been at all directed to the accidents which have taken place in the mines of this kingdom?—Only in reference to the lamps used.

Have you made any experiments on the lamps?—Yes; I have made a considerable number of experiments during the last three or four years.

On the lamp invented by Sir Humphrey Davy?—On his lamp, and also on an improvement of it.

What is your opinion of Sir Humphrey Davy's lamp, as a security against the effects of carburetted hydrogen gas? I do not think it is a security, because the lamp will allow the passage of the flame through it.

Will it allow the passage of the flame when suspended in the carburetted hydrogen gas, without motion?—I have never seen the flame pass through the wire gauze when the lamp was at rest, and the gas not in motion. Under such circumstances the lamp may be safe, at least I have never seen it explode.

Have you seen it explode under other circumstances?—Repeatedly, when the lamp or the gas has been in motion. I was accustomed for years to show the Davy lamp in lecture, and by certain experiments to demonstrate, as I then thought they did, the security of the lamp. The experiments are those usually shown in the lecture room. I am now convinced they are fallacious. There are three methods mentioned by Sir Humphrey Davy, of proving the safety of the lamp: the first method (mentioned at pp. 14, 15 of his work, on the "Safety-lamp for Coal-miners,"), is to plunge the lamp into an explosive mixture contained in a large vessel; the second method (mentioned at p. 16 of Davy's before-mentioned work), is to hang the lamp in a large glass receiver, through which a current of explosive gas is made to pass; the third method adopted by Sir Humphrey Davy, was tried on a "blower" in a coal mine. He held the lamp in this blower, and though the wire gauze soon became red hot, the flame did not pass until the gauze had reached a welding heat, and began to burn. (This is mentioned at p. 138 of his work.) Of course lecturers in London have no means of exposing it to a blower, and therefore they have usually employed, as class-room experiments, the two first mentioned methods of trying the lamp. I have never found the lamp explode by either of those methods; but, as I have already remarked, they are fallacious experiments.

You think the lamp, if exposed to a current of explosive gas, decidedly unsafe?—Yes, certainly. I will not say it is absolutely safe when the lamp is not moved, and where there is no current; but under such circumstances, I have never seen it explode. I may perhaps mention in what way I became convinced of the insecurity of it. Mr. Roberts (who I believe has been examined by this Committee) has been employed by me for some years as a manufacturer, &c. of lamps; and on several occasions he told me that he was certain the Davy lamp was not "a safety-lamp." Although I was aware that Roberts had particularly directed his attention to this subject, and from having been a working miner for many years, must have been practically well acquainted with the lamp, yet as he was not accustomed to the niceties requisite in conducting chemical experiments; as I and many others had tried the lamp, and as far as I then knew, it had always been found a security against the passage of flame, I confess I thought Roberts was labouring under an error. At his urgent and repeated request, I ultimately consented to attend at Upton and Roberts's manufactory, to see him prove, if he could, the insecurity of the lamp, though fully persuaded that I should be able to find out some fallacy in his experiments. In a few minutes he showed me that flame might be made to pass through a Davy-lamp; but thinking that the lamp he employed might not be perfect, I sent for one which I had repeatedly tried, and which I knew to be a perfect instrument. The flame passed through this also. Subsequently I tried the Davy lamps of some friends, and in every case they allowed the passage of the flame. I then undertook a series of experiments, the result of which is a firm conviction of the insecurity of the Davy lamp when in motion, or when placed in a current of explosive gas. I think we may easily comprehend why the flame does not pass when both the gas and the lamp are at rest: it depends on two circumstances, namely, the less heat developed, in consequence of less gas burning; and secondly, the carbonic acid formed not being got rid of, checks the passage of the flame through the wire gauze. I think, however, that the latter is the most efficient cause, since the gauze will allow the passage of the flame when it (that is the gauze) is not hot enough to be luminous, so that a great heat is not essential. Now when a Davy-lamp is plunged into a jar of explosive mixture, a quantity of carbonic acid is immediately formed, and this mixing with the unconsumed portion of the explosive mixture, diminishes its combustibility, and therefore its explosive powers. If, on the contrary, you expose the lamp to a current of an explosive mixture, the carbonic acid which is developed is immediately got rid of, (as well as the nitrogen of the portion of atmospheric air employed in carrying on the combustion,) and then the flame passes. A

gentle motion of the lamp, combined with the current of the gas, very much promotes the passage of the flame. If, for example, a lamp is held before a jet of gas until it becomes hot, (a red heat is not essential,) and then gently moved, the flame will pass, and the experiment may be repeated successively a number of times in the minute. Sir Humphrey Davy was well acquainted with this fact, that carbonic acid diminishes the explosive property of gaseous mixtures. At p. 10 of his work, he says:—"On mixing one part of carbonic acid or fixed air with seven parts of an explosive mixture of fire-damp, or one part of azote with six parts, the powers of exploding were destroyed." At p. 32 of his book, Sir Humphrey Davy states that "the consideration of these various facts led me to adopt a form of lamp in which the flame, by being supplied with only a limited quantity of air, should produce such a quantity of azote and carbonic acid as to prevent the explosion of the fire-damp, and which, by the nature of its apertures for giving admittance and exit to the air, should be rendered incapable of communicating any explosion to the external air. It is evident, therefore, he endeavoured to form a lamp which should be safe from the combined influence of the carbonic acid gas, of the azote, nitrogen gas, and of the wire gauze.

State to the Committee in what way you think the lamp of Messrs. Upton and Roberts is an improvement on that of Sir Humphrey Davy?—There are several points of view under which we may regard it as an improvement. The first place, it is quite evident that the wire gauze of the common Davy lamp partially obstructs or impedes the passage of flame through it, and therefore if you employ two layers of wire gauze, the obstruction is greater than that produced by one. Now in practice two layers of gauze are objectionable; first, because such lamps would give very little light, and secondly, because the gauze soon becomes clogged up. But even these objections could be overcome, there exists a still more weighty one, namely, that the lamp, even with a double layer of wire gauze, is not a cure. I have repeatedly passed flame through lamps of this kind; the experiment occupies a little longer time, because the flame passes less readily through two than through one; but it does pass, and therefore such a lamp is insecure. Now in Upton and Roberts's lamp only one layer of wire gauze is employed, and therefore there is little impediment to the light. To prevent the effects of lateral currents, they use a cylinder of glass placed external to the gauze. This is one improvement upon the common Davy lamp: it must be admitted, however, that Davy, at p. 13 of his work, proposed screens to increase the security of his lamp; but neither the screens of Davy, nor the cylinder of glass employed by Upton and Roberts, would of itself be sufficient to make the lamp secure. Hence, therefore, we come to the next part of the improvement made by Upton and Roberts, and which consists in the manner they admit the external air, or the explosive mixture, to the interior of the lamp. Around the lower part of the lamp is a number of apertures, through which the air passes into a chamber, the ceiling of which consists of layers of wire gauze. To increase the security of the lamp, any number of these layers may be employed; they are easily taken out and cleaned, and they offer no impediment to the light; whereas in Davy's lamp, any increase in the number of wire gauzes diminishes the light. This then constitutes a most important improvement. I now pass on to another improvement in the lamp, and which in fact constitutes its superiority to all other safety lamps that I have seen: when the air or gas has passed through the wire gauzes, it does not immediately pass into the body of the lamp, but into a second chamber, bounded above by a conical piece of brass, having a central aperture about the size of a sixpence, in the middle of which is the wick; so that all the air passing into the lamp is brought in contact with the wick, and thus increases the quantity of light evolved; and the aperture is much smaller than the cavity of the wire gauze cylinder, the latter cannot fill with flame when introduced into an explosive mixture, so that the flame can never touch the wire gauze cylinder; and, indeed, between the flame and the cylinder there is no oxygen to support combustion, as may be shown by its extinguishing a taper; we have therefore the very condition Sir Humphrey Davy wanted, since no taper will burn in the space between the flame and the wire gauze; so that you observe we have three impediments to the lateral passage of the flame, a layer of carbonic acid, a wire gauze cylinder, and a cylinder of glass. The safety at the bottom consists in any number of wire gauzes the maker may choose to employ, and therefore if the lamp is not safe it is his fault.

Then how is the top of the lamp secured?—It is made safe by layers of wire gauze, and also by having a contracted aperture to the glass, by which the draught is increased, and all the carbonic acid gas that is formed below, by the combustion of the fire-damp, or of the oil of the lamp, as well as the nitrogen of the atmospheric air, contribute to prevent the combustion of a body in this situation, for if you put a lighted taper here, it is extinguished immediately. Thus then this lamp is made safe at the sides, at the bottom, and at the top, by different methods. If the glass should break, the lamp is then a common Davy-lamp.

Have you made experiments on that lamp in the explosive mixture?—I have submitted this lamp to every experiment I have submitted the Davy-lamp to, and I could never get this to explode; indeed, I have submitted this lamp to a test (oxy-hydrogen gas) which it is not likely to be put to in actual practice.

This lamp then is safe in a draught or current of explosive gas?—Yes, it is perfectly safe in any current of carburetted hydrogen gas, or of this gas and oxygen, or of this gas and air. I have repeatedly tried it, and the flame will not pass. When the explosive mixture was blown in gently, the flame increased in size; if passed in with violence, the flame was extinguished, but no passage of it will take place through the gauze.

Have you made any experiments in coal mines with it?—No, I have never been in a coal mine with it. My experiments were made with coal gas and with hydrogen gas.

You think that the lamp would be decidedly a protection to the collier, under any circumstances to which he could be exposed from carburetted hydrogen gas?—As long as the lamp is perfect, it is safe; but if the glass break, it would be no safer than the common Davy lamp; as long, however, as the lamp is perfect, it is in my opinion quite safe.

Has it ever occurred to you to consider whether there might be any means of neutralizing the carburetted hydrogen gas found in the mine?—It may be absorbed by chloride of lime, and the French have proposed that as a means of preventing the explosions of the fire-damp; so that there are three plans proposed to guard against these accidents, namely, by the employment of safety-lamps, by ventilation, and, lastly, by the use of chloride of lime; but the last method is absurd when we bear in mind the extent of the collieries in this country.

Do you think that where the air-course extends, as in those collieries, 20 or 30 miles, the application of the chloride of lime in an effective manner would be at all practicable?—It would be impossible to distribute this substance over so great an extent of surface, so as to render a mine safe, and the miner would not be able by it to counteract explosions by sudden evolutions of gas. This chloride of lime might, however, be serviceable in absorbing the gas, so as to enable a miner to breathe with safety. A flask dipped in a weak solution of the chloride might be applied over the mouth and nostrils, if it were required to enter a chamber containing a large quantity of carburetted hydrogen.

Has your attention been drawn to the other invention of Mr. Roberts for removing bodies from the mine after an explosion?—Yes. I have frequently seen the fire-hood tried on poisonous gases, and have generally illustrated its operation in my lectures whenever I have had to speak of the fire-damp.

You think that the hood of Mr. Roberts is a useful invention?—Yes, certainly.

And likely to accomplish what it professes to accomplish?—Certainly, as long as oxygen is preserved in the air to supply life, that instrument will remove several of the most noxious of those gases likely to be met with; for example, it would remove carbonic acid, sulphuretted hydrogen, carburetted hydrogen, the fumes of burning sulphur, &c.

Have you ever personally visited any of the collieries?—No, I have not; I am very desirous of obtaining fire-damp for analysis and experiment, but have not yet succeeded. And here I would again remark, that all my experiments were conducted with coal gas or with hydrogen gas. Now I am aware it may be objected that the fire-damp of coal mines is not precisely the same as coal gas; but to that I would reply, that Sir Humphrey Davy thought it necessary to make the lamps safe to the test of coal gas; and, therefore, I am justified in trying his lamp with it. Secondly, I believe the fire-damp of coal mines is liable to variation, though that can be but an opinion, as I have not examined it. The opinion is founded partly on the statements of Davy, who mentions that he suspects clefiant gas to be sometimes present, and even admits the possibility of pure hydrogen being disengaged in mines, partly from the accounts of miners, some of whom have told me that the gas burnt very differently at different times. I was informed yesterday by Mr. Goldworthy Gurney, that pure hydrogen had been sometimes actually detected; and when we consider the composition of coal, and the variable products got by the distilla-

CARN BREA.

(Continued from No. 18.)

The time was now come when the Roman empire was destined to undergo one of those revolutions which form so prominent a portion of ancient history. It had subdued no inconsiderable part of the known world; and if it had given peace and civilization to its different acquisitions, these blessings were not to be enjoyed without concomitant evils, evils savouring, in too many instances, of slavery and oppression. The empire was now assailed by the northern barbarians, and for its defence was obliged to call in the aid of the Britons and other warlike nations, who, under Roman training, had added discipline to their native bravery; and whose blood was now to be vainly shed for the sustenance of the enormous fabric by which they had been subdued. The flower of southern Britain being wasted in the sanguinary struggles of the expiring empire, it soon became a prey to other enemies. The Picts, though of the native British race, were enraged, not only against the conquering Romans, who had ravaged and laid waste their country, but against their southern neighbours, who had formed so close an alliance with these formidable enemies, burst the Roman barriers, taking terrible revenge on the defenceless Britons. "The groans of Britain" were sent to Rome, but the Romans, unable to help themselves, were equally incompetent to assist their allies. Hence the Britons were obliged to abandon their agricultural pursuits, and, forsaking their comfortable habitations, they betook themselves again to the forests and mountains; and the ancient Cornish once more took up their position on and about Carn Brea. There, and in other like places, they again organized their forces, and, recovering themselves, they assumed the offensive, and obliged the Picts to retreat within their own frontiers.

The Britons were again left to themselves; but their repose was of short duration. Britain soon became the theatre not only of domestic feuds, but of theological disputes; Cornwall, as usual, came in for her share of these dissensions, and the disciples of the celebrated British theologian, Pelagius, could find no more appropriate spot for a sort of "Mars Hill" than Carn Brea; there they raised their altar to an almost, if not altogether, "unknown God." These disputations on theology were not slow in assuming an alarming shape; domestic feuds were rending the breast of Britain, and she was again threatened with a foreign invasion; and it was these domestic calamities, and foreign menaces, which paved the way for the introduction of the Saxons; a people who, in these barbarous times, were preeminently distinguished for their manners, their policy, and their valour. The Saxons had long been amongst the most formidable enemies of the Romans; the dissolution of the Roman empire now made way for their enterprising spirit, and it was with no little satisfaction that they acceded to the request of the British deputies who had been sent to solicit their assistance, and whom they readily accompanied to Britain. The Saxons having once obtained a footing in our island, appeared in no haste to depart, but regarded it rather as their future home. Scarcely had the Britons ceased to applaud their policy in calling in such valiant allies, under whose protection they fancied themselves secure, than the Saxons, captivated by the fertility and riches of Britain, threw off the mask of friendship, and proceeded to open and determined hostilities against her too confiding sons. Indignant at such treachery, our ancestors flew to arms, and Britain was again the scene of a protracted and sanguinary war. The Britons, beset on every hand with hordes of invading Saxons, were assiduous to adopt the best measures for their preservation. In their extremity, they deposed the pusillanimous and vicious Vortigern; and under the command of the brave Vortimer, they nobly maintained the high character which they had acquired, no less by native valour, than by Roman discipline. The treacherous Horsa fell on the bloody field of Eaglesford; and the insatiate Hengist was left in sole command of an army destined to steep the British soil in human gore. After the death of the brave Vortimer, the gallant Ambrosius assumed the command; and so nobly did he and his brave companions in arms sustain the combat against desperate odds, that, at the end of a century, from the first introduction of the Saxons, the far greater part of Britain was still unconquered. Saxony, however, continuing to roll an incessant tide of invading foes into Britain, the southern part of the island was at length subdued; the language, the customs, and the policy, which the Britons had acquired under Roman dominion, were changed for those of Saxon descent; the towns and cities built under Roman auspices were reduced to ashes; and Britain was again reduced to a state of barbarity. Having extended their conquests thus far, they determined to push them to the farthest extremity; Wales must be subdued, Cornwall must yield to Saxon valour, but not until Carn Brea had been drenched with Saxon blood.

The Britons had become converts to Christianity under the dominion of the Romans. The doctrines of the Christian faith had now become so prevalent as to excite almost universal attention, and our ancestors had derived no little benefit from their healing influences. Cornwall was a joyful partaker in its blessings, and the circle, so long held sacred to the Druidical activities on Carn Brea, had been long resonant with the joyful tidings of the gospel of peace. But the unfortunate schism of the Pelagians had long since converted it into an arena of theological controversy, wherein the doctrine of original sin was argued with no little acrimony between the orthodox clergy and the disciples of Pelagius; and that divinely system, so eminently calculated to produce "peace on earth, and goodwill towards men," was, through the machinations of Satan acting on the frailty of human nature, converted into a subject of strife and contention. Now, however, the Old Cornish Christians had to sink all minor differences, their religion, their liberty, and their lives were at stake, and they had to unite to repel the attacks of an inveterate and idolatrous foe.

Hengist and Horsa, were assiduous to trace their descent from one of their ancient deities; namely, Woden. An origin of this sort tended to enhance their consequence in the eyes of their countrymen; and, in connexion with other favourable circumstances, frequently invested them with the supreme authority. It appears, however, that some other tribe was now in the ascendant; and Egbert, who claimed to be the sole descendant of the ancient Woden, instead of endeavouring to regain that sovereignty, which his ancestors were wont to exercise over the Saxon tribes, chose rather to turn his arms on the inhabitants of Cornwall; deeming it an object worthy his high origin to exterminate the Cornish Christians, and establish the worship of Woden on their favourite position at Carn Brea. Big with this project, he marched his army into Cornwall, and several pitched battles were fought with alternate success. During his irruption into Cornwall, his own territories were invaded by a neighbouring prince, and he was obliged to withdraw his troops without accomplishing his design. Egbert now led his army against the invading tribe, victory crowned his efforts, the Mercians received a mortal blow, and he went on from conquest to conquest until he dissolved the Heptarchy, and consolidated its several states under his own absolute dominion. It was under these auspicious circumstances that he again turned his attention towards Cornwall, and hastened to lead his powerful and victorious veterans against our ancestors. To describe the bloody strife of the Cornish and Saxon combatants at Carn Brea, would be little more than a recapitulation of that already described between the Cornish and Romans. Suffice it to say, that Roman discipline had been added to British valour, and all that could be effected by the happy union of these heroic virtues, was done in defence of this favourite position. But the old Cornish heroes were once more overpowered by superior numbers, and Carn Brea, after being again drenched in human gore, after again responding to the agonizing groans of myriads of expiring warriors, again became the scene of a degrading and idolatrous worship. The superstitions of the Saxons appear to have been founded on a series of traditional tales and legends, handed down to them by succeeding generations, and can scarcely be said to have been reduced to any regular system, or to be supported by any political institutions. Woden, from whom they traced their origin, was handed down to them in these fabulous legends as the god of war, consequently he became their supreme divinity, and the primary object of their adoration, and, flushed with their success, and attributing their victories to his influence, a temple was instantly reared to his honour on the summit of Carn Brea.

(To be continued.)

Fatal Mine Accidents.—On Wednesday, the 30th ultimo., H. Edwards, of Camborne, a lad about 15 years of age, was employed at the North Roskear mine to wheel some stuff over one of the shafts. It appears that he had gone to and fro repeatedly, and the place was considered safe; at last, however, melancholy to relate, by some means unaccounted for, he fell into the shaft and was killed on the spot. He was found about 50 fathoms below the place where he fell away, in a shockingly mangled state. An inquest was held on the body on the following day, and a verdict of accidental death returned.

SCIENTIFIC SOCIETIES.
GEOLOGICAL SOCIETY OF LONDON.

January 6th, 1836. Mr. Lyell, President, in the Chair. The following communications were read:—

1st.—An extract from a letter addressed to the president, by Captain Bayfield, R.N. It gave an account of the transporting power of the ice packs formed every winter on the extensive shoals which line both sides of the St. Lawrence. These shoals are thickly strewn with boulders which become entangled in the ice, and in the spring when the river rises from the melting of the snow, the masses of ice are floated off, frequently carrying the boulders to great distances. Captain Bayfield also states that icebergs in which boulders, stones and gravel, are imbedded, are annually drifted down the coast of Labrador, through the strait of Bellisle, and for several hundred miles up the Gulf of the St. Lawrence.

2ndly.—A letter from Mr. De la Beche, explanatory of the geological position of a collection of fossils from the north of Cornwall. Mr. De la Beche says, that in the grauwacke of western Somerset, Devon, and Cornwall, natural divisions may be made, founded on marked characters, but he is of opinion that the whole of this district belongs to a system older than the Silurian formations of Mr. Murchison. Some of the organic remains were procured at Dina's Cove, Padstow Harbour, Trevelga Island, (Lower St. Columb Porth) and Towan Head, near New Quay, from the strata which is associated with sandstone, conglomerates and limestone, and which is of the same age with the fossiliferous strata of Tintagel. The remainder of the collection was procured near Bodmin, by Dr. Potts, and in the vicinity of Liskeard. Mr. De la Beche also states that there are evidences in Somerset, Devon, and Cornwall, of two movements of the land, one to a height of 30 or 40 feet above the present sea level, and the other to an uncertain depth beneath it, since the production of the existing vegetation of the land, and the mollescent inhabitants of the neighbouring sea.

3rdly.—A memoir by Mr. Griffith, President of the Geological Society of Dublin, on the syenite and syenitic greenstone veins which traverse mica slate, at Goodland Cliff, and Chalk, at Torr Eskert, to the south of Fairhead, in the county of Antrim. The district described in this paper, consists of inclined strata of mica slate, with subordinate beds of hornblende slate and limestone, overlaid by nearly horizontal strata of coal measures, new red sandstone and chalk, and on these secondary formations repose a mass of rudely columnar trap, the northern termination of which constitutes the magnificent promontory of Fairhead.

The veins of syenite and syenitic greenstone, in Goodland Cliff, might be mistaken for regular beds, forming an integral portion of the mica slate, but Mr. Griffiths determined by careful inspection that the veins are irregular in their course, and uneven on their surface, moulding into the indentations of the schist. Owing to the occasionally covered nature of the surface, these veins cannot be traced continuously to Torr Eskert, but by laying down their line of bearing on the Ordnance Map, and by making due allowance for their average inclination, and the elevation of the hill, Mr. Griffiths entertains no doubt that the syenite, which traverses the chalk of Torr Eskert, is a prolongation of one of the veins in the mica slate of Goodland Cliff. In mineral character there is no difference. The chalk in contact with the syenite is sometimes crystallized, always hard—the colour is changed from yellowish white to reddish white, and masses of disrupted chalk are entangled with the syenite. In conclusion, the author says, that if he had substantiated the views advocated in his memoir, a new and important fact has been added to those already described by other observers, which may ultimately lead to the assigning of a comparatively recent origin, not only to syenitic veins, but to crystalline rocks generally, when found associated with schistose strata.

NATURAL HISTORY SOCIETY, NEWCASTLE-ON-TYNE.

At the last general meeting of this Society, held on Monday the 21st inst., John Adamson, Esq. in the Chair. Major Emmett read a paper on the gas of coal mines, in the course of which he mentioned some of the many plans proposed to avoid the danger of explosion, and more particularly to the different modifications of the Davy Lamp—he referred to the evidence lately published by the House of Commons, on the subject of accidents in mines, and particularly to the modification of Davy's lamp, invented by Upton and Roberts, and exhibited before the parliamentary committee. A conversation took place after the paper was read, when it was determined that the society should suggest to the mining interest of the district the importance of having the gases evolved in different mines carefully analysed. Upon the motion of Nicholas Wood, Esq., seconded by Mr. Henry Turner, the thanks of the society were given to Major Emmett, who, in return, stated, that although he was soon to leave the country, yet if he could be of use to the society where he was going, it would give him pleasure to be so; John Clayton, Esq., was unanimously chosen one of the vice presidents. Mr. William Clark, of Walker, was elected an ordinary member, and Capt. Doral, of the ship Duncan Gib, an honorary member of the society; three gentlemen were proposed for ballot next month, and the following presents were announced as having been received since the last meeting, for which thanks were voted to the donors, viz.:—A deposit from a water-pipe, by Mr. John Hancock; four species of fossil shells and two beetles by Mr. Dennis Embleton; a gold fish, and a mass of rubbish consigned from water, by Mr. James Veitch; a robin red breast by Mr. W. A. Mitchell; a grebe by Mr. John Thornton; a vegetable fossil by Mr. Fairless; six specimens of corn, reduced to a cinder by fire, Mr. Armour; a silver steel-yard, by William Webster, Esq.; a flint containing a fossil shell by Mr. Ingledew; a fine collection of bird skins from Van Diemen's Land, David Akenhead, Esq.; a collection of rare shells, by Mr. Cumming; several vegetable fossils from a quarry at Carrhill, with a section of the quarry, by Mr. Falla; a vegetable fossil, by Michael Hall, Esq.; a bottle of water, containing muriate of soda, from the bottom of the Monkwearmouth Pit, by Major Emmett, R. E.—*Newcastle Courant*.

TRADITIONAL FRAGMENTS OF MINING HISTORY,

BY A CORNISHMAN.

The Fair, or Sober John and Capt. Joe.

CHAP. IX.

Having accomplished his purpose as to mining business, Sober John had next to turn his attention towards his notable project, otherwise Captain Joe's "bal out in the sea." Here he had to dwell on nautical affairs; and he was just as much at home there as on mining subjects. After describing the perils of the sea, he went on to treat of the untold treasure which lay in the caverns of the great deep, and speculated on the probability that these riches will, sooner or later, by means simple perhaps in themselves, be again rendered subservient to the use of man. He next expatiated on the absolute certainty of a successful invasion of that part of the kingdom of old Neptune called Gull'em Bay, and the forcing of the old monarch of the deep, to surrender up that treasure, which he had so long kept possession of in the bulk of the Old Spaniard, and its extraordinary freight of doubtless. Much of his business on this head, however, was already done by the famous description already alluded to. It was here set forth, on competent authority, that these riches had, from time immemorial, been coveted by all lovers of lucre, who had tortured their brains not a little to devise the means of rescuing them from the world of waters, and placing them once more on terra firma, secure in their own coffers. It then went on to ascribe the different failures that had occurred from generation to generation in these attempts to very plausible causes, and to show that the ancients were not sufficiently conversant with the arts and sciences for the successful execution of this important enterprise. It then touched on the rapid strides recently made in every thing connected with science, and dwelt more particularly on the improvements effected in the different apparatus requisite for the execution of this notable project. This was followed by a sketch of the coast, admirably done by Sober John's own hand, in which Gull'em Bay was marked out with the greatest accuracy, and the position of the Old Spaniard, with the depth of water in which she lay, and her distance from the shore was minutely delineated. In conclusion, it described the nature and power of the machinery, necessary for weighing the hulk containing the treasure, and warping her safely from Gull'em Bay into the adjacent harbour, and with an estimate of the expense which might be reasonably supposed to complete the project. In short every thing was minutely described, but the profits; and the reason for leaving these indefinite was a most satisfactory one, namely, they were certainly above all comprehension.

of it, I do not think there will be much hesitation in believing that the gas may vary very considerably in coal mines. You think it possible that a lamp might be safe in one mine and not in another?—I do not think the Davy lamp is safe in any of these gases, but I have not tried it with pure light carburetted hydrogen, nor with the fire-

Would it not be a great advantage were scientific men to descend the mines and experiment on these gases?—Very great indeed.

Do you think that if a commission of scientific men was appointed, either by the colliery proprietors or by Government, to visit the mining districts, and make experiments on the spot, it might not be very conducive to the object this Committee has in view?—I think it would be desirable: 1st. for the sake of humanity; 2d. for the interests of the coal-owners; and 3d. for the advancement of science.

Do you think it might lead to such improvements as could not well occur to scientific men without the sort of experience they would derive from personal inspection of the mine?—Certainly; it is very desirable that the science of science should acquire practical information on all these points.

Have you any suggestions to offer to the Committee?—I would respectfully suggest the propriety of submitting all the lamps to trial in the presence of the Committee; we could soon show those which were secure and those which were not so; and this would be the most convincing method of ascertaining their relative values.

You would have no objection to give your attendance?—I should be very happy.

Do you know if Roberts and Upton's lamp has been tried in a mine?—I believe Mr. Roberts or Mr. Upton, when in the country, procured some fire-damp from a mine, and showed the insecurity of the Davy lamp with it, before some coal-owners.

But is it not in regular use?—No.

What is your opinion as to the development of fire-damp in coal mines?—It is admitted by geologists that coal is of vegetable origin; that causes imperfectly comprehended have led to the conversion of immense masses of vegetable matter into coal. It seems also that fire-damp is developed during the formation of coal, but is kept from escaping by the pressure of the superincumbent strata. Hence then, when coal is covered by shale, the gas is pent up and prevented from passing outwards, and such coal is generally of better quality than that found under sandstone, which is pervious to gas, and therefore which allows the escape of the fire-damp. The great elastic force which the gas frequently evinces during its escape from coal, proves that it was in a state of great compression, and some have even suspected it may have been in the liquid state. Mr. Hutton has even pointed out the cells, which, in all probability contain this liquid fire-damp. When the compressing force is removed, this liquid is supposed to be instantly converted into gas, and hence the eruptions in blowers are easily accounted for.

In what way has Mr. Hutton stated that opinion?—He has published his opinions, and given drawings of the structure of coal.

Do you think that in all coal there is a certain portion of inflammable gas?—I believe so; but the quantity met with is variable; and this perhaps may arise from various local circumstances.

Is it your opinion that when the coal lies in an inclined position, and drops out to the surface, a portion of the gas will escape, and a mine so situated may be less liable to explosions than one placed horizontally?—I should expect this to be the case.

ARTESIAN WELLS.

By boring the ground perpendicularly, in certain localities, to a sufficient depth, sheets of subterranean water are reached, which amount to the surface through the channel opened for it by the augur, and frequently form an elevated and abundant jet. Spouting fountains formed by art, or even simple wells of a small diameter, supplied by water coming from a great depth, bear the name of Artesian fountains, Artesian wells, and bored wells. They are called Artesian from Artois, a province in the north of France, where it appears the greatest attention has been paid to the discovering of subterranean waters. It cannot, however, be denied that this sort of well was perfectly familiar to the ancients, and that they knew how to make them. That extraordinary people, the Chinese, are also said to have known the use of Artesian fountains for thousands of years. In certain parts of Italy it is very probable that Artesian wells were used at remote periods. Bernardini Ramazzini informs us, in fact, that in digging among the ruins at the very ancient town of Modena, leaden pipes were sometimes found communicating apparently with ancient wells. Now, what could have been the use of these, but to discover, at the depth of twenty or twenty-five metres (that is to say much below the depth of unwholesome water resulting from local infiltrations), the clear and pure sheet of water, which supplies all the fountains of the modern city? In France there are no means of ascertaining when they were first used. The most ancient known is said to be of the year 1126, and exists in the old Carthusian convent at Lilliers, in Artois. Stuttgart, the capital of Wurtemberg, if we are not misinformed, also possesses Artesian wells of a remote date, which, however, cannot be fixed. The same may be said of the well, existing within the precincts of Carisbrook Castle, in the Isle of Wight, celebrated as the prison of the unfortunate Charles I., and which is three hundred feet in depth. But when we consider that some of the mason-work of the castle has existed for twelve hundred years, we may boldly assert that the well which supplied the garrison with water is coeval with the first foundation of that ancient fortress. Adverting again to Africa, it appears, from a passage in Shaw's Travels, that the inhabitants of the desert of Sahara have been long acquainted with Artesian wells. Mr. Shaw thus speaks, upon the authority of the natives themselves:—"The wad-rag is a collection of villages situated far in the interior of Sahara. The villages have neither springs nor fountains. The inhabitants procure water in a curious manner, by digging wells one hundred, and sometimes two hundred fathoms deep, and never fail to find water in abundance. To effect their purpose, they remove several beds of sand and gravel, until they find a sort of stone resembling slate, which they know is seated precisely above what is called bahar-tah el erd, or 'the sea beneath the earth.' This stone is easily pierced,—after which the water issues so suddenly and so abundantly, that those who descend for this operation are sometimes reached by it and drowned, or suffocated, though they are taken out as quickly as possible." Before his arrival in France, Dominique Cassini, about the middle of the seventeenth century, had caused to be constructed at Fort Urban, a well, the water of which spouted into the air fifteen feet above the ground; and, when confined within a tube, it ascended to the roofs of the houses. These historical details should suffice to make us hope that even those whose constant rule is to give their approbation only to what is ancient, will now become the advocates of Artesian wells.—*Literary Gazette*.

BOTTOM OF THE SEA.

The bottom of the basin of the sea seems to have inequalities like those of the surface of continents. Were it dried up, it would present mountains, valleys, and plains. It is covered almost throughout by an immense quantity of testaceous animals, or those who have shells, intermixed with sand and grain. The bottom of the Adriatic Sea is composed of a compact bed of shells, several hundred feet in thickness. A celebrated diver, employed to descend into the Strait of Messina, saw there, with horror, enormous polypi attached to the rocks, the arms of which being several yards long, were more than sufficient to strangle a man. In many seas, the eye perceives nothing but a bright sandy plain at bottom, extending for several hundred miles without an intervening object. But in others, particularly in the Red Sea, it is very different: the whole body of this extensive bed of water is, literally speaking, a forest of submarine plants and corals, formed by insects for their habitations, sometimes branching out to a great extent. Here are seen the madrepores, sponges, mosses, sea mushrooms, and various other things covering every part of the bottom. The bed of many parts of the sea, near America, presents a very different, though a very beautiful appearance. This is covered with vegetables, which make it look as green as a meadow; and beneath are seen thousands of turtle, and other sea animals feeding thereon. There are some places of the sea where no bottom has yet been found; still it is not bottomless. The mountains of continents seem to correspond with what are called the abysses of the sea. The highest mountains do not rise above 25,000 feet; and, allowing for the effects of the elements, some suppose that the sea is not beyond 30,000 feet in depth. Lord Melville used, in the Northern Ocean, a very heavy sounding lead, and gave out, along with it, cable-rope to the length of 4,600 feet without finding the bottom. But the greatest depth hitherto sounded was by Captain Scoresby, who, in the Greenland Sea, could find no bottom with 1,200 fathoms, or 7,300 feet of line. According to Laplace, its mean depth is about two miles; which, supposing the generally received estimate to be correct, as to the proportion the extent of water bears to the dry land on the earth's surface, would make about 220 millions of cubic feet of water.—*Rev. C. Williams' Works*.

By this time the hog-merchants themselves were not so much enamoured of the Gull'em Bay project as the cockneys; and the shares of the notable speculation were grasped at with so much avidity by the Bull and Mouth visitors, that Sober John had great difficulty in reserving a few shares for himself and friend.

A Company for carrying the project into execution was readily formed; and the princely fortunes of the fortunate shareholders were almost ready to drop into their pockets. The different documents necessary for the execution of this project, and for the working of the different bays, were readily made out, and duly signed, sealed, and executed by Sober John; and the deposits on the different shares were sacked up in the old sampling bag, to the great satisfaction of both the hog-merchants.

This satisfaction, however, was but of short duration, for the pair were soon at "loggerheads" between themselves. Sober John was pinner, and bore the bag; this, while it was light, was borne with so much forbearance by Captain Joe, that his comrade had not unfrequently complimented him with the appellation of *Job*. But now the bag had acquired bulk, Captain Joe did not take it so patiently; and on finding that he was kept, as it regarded money matters, on short commons, he resorted to Sober John, and nicknamed him *Judas*. The economizing principles of Sober John, had frequently led him to remonstrate with his comrade on his free and easy mode of living: this as frequently led to a fracas between the pair; Boniface would sometimes undertake the office of the fly-catcher, and attempt to mediate; but as the quarrels were generally about Captain Joe's scores, Boniface, who generally sided with Sober John, came in for his share of abuse, for Captain Joe invariably swore "that he scored with 'two clued chalk,' and that he was as big a rogue as Judas." The deposits came in just in time to save the credit of the hog-merchants, who by this time, despite Sober John's economy had nearly "gone the whole hog," the joint stock purse being reduced to such a state of ebb, that it contained little, if any thing more than that which was described by Rochester as coming to the King's share out of a sackful of taxes, namely, a solitary sixpence: and were it not for these fortunate deposits, the hog-merchant's scores at the Bull and Mouth would certainly have to be charged to uncle Will Jennings, an old gentleman in Cornwall, proverbial from time immemorial, for being saddled with all bad debts.

During the time in which their exchequer was at this low ebb, Captain Joe commenced courting the cook; passing himself off as a sturdy bachelor, he made Mrs. Drippingfat such little presents as his means would allow, and promised her a great deal more, with a husband into the bargain, as soon as he had sold his bays. This affair might have been attended with rather serious consequences, as *cookee* had another lover; and the chamber-maid was a "lettel" in love with Captain Joe; but as Captain Joe's regard for the cook consisted chiefly, if not altogether in a love for the contents of the pantry, into which it gave him an introduction; and as he was generally at his toddy when the other lover looked in, the only disagreeable circumstance attendant on this gallantry was a little jealousy on the part of the chambermaid, who played him a few tricks in consequence. Mrs. Betty found a willing confederate in the boots, who had more than once said some soft things to her herself; and had felt a little mortified on discovering that she had kept him at more than the usual distance on account of Captain Joe; he was therefore nothing loath to assist in serving out the hog-merchant as the price of his again being restored to favour. Formerly, when Captain Joe had mollified his clay a little more than usual no nurse could take more care of a sick patient than Mrs. Betty did of him; and tradition says, that on one or two occasions he would actually have gone to "hull" on the floor, were it not for her kind offices in assisting him into bed. Now, however, the tables were turned, and Captain Joe, by some fortuitous circumstance having taken a little more than a *quantum sufficit* of toddy on a certain occasion, instead of being helped to bed as usual, was left to grope on by himself: but this was not all, for the confederates had so mystified and "transmogrified" the landing place, by placing certain moveables in positions directly opposite to those which they were wont to occupy, that Captain Joe missed several points in his *dialling*, and instead of getting into his own bed-room, he groped his way into an opposite closet containing a shower-bath.

(To be continued.)

NOTICE TO CORRESPONDENTS.

EXTRA SHEET.—We this week perform our promise of giving an extra sheet, and it is with pride and pleasure we are enabled to refer to the important and interesting matter contained in the columns of our present number as the best evidence of the success which has attended our exertions, and which enables us not only to issue the additional expense attendant on the publication of an extra sheet, the stamps on which, in addition to that of the regular number, amount to more than the sale price of the Paper (not to remark on paper, printing, and our own labours) will, we hope, be considered as a grateful tribute in acknowledgment of favours conferred.

MAP OF CORNWALL.—Is in progress; the wishes of several correspondents shall, so far as is practicable, be complied with; we cannot, however, promise it so early as we at first contemplated, finding that we must be indebted to many for local information. It is our desire to render it as perfect as possible, and therefore it is that we renew our invitation to our readers to contribute such information as they may possess, with suggestions. The Map will be accompanied by a supplementary number for reference.

COAL DISTRICTS.—Our correspondent at Newcastle-upon-Tyne no doubt would much like us to give a map of the coal districts, but one at a time, "if you please." We have thought on the matter, and if he will furnish us with the data he refers to, we shall be happy to take the subject into more mature consideration.

JACK PRINCIOUS.—This is a *precious* gent., and not particular as to the terms he applies to others, or the libellous attacks of which he would wish to make the Editor of the Mining Journal the scapegoat. Let him throw off his disguise—if an "Old Timer," we think we must have heard of him at least by name, but the mask fits not well. If the statements in his letters be correct, and he will give us his "precious," not "precious" name, we will (avoiding libel) not hesitate to draw the attention of the shareholders to the subject on which he treats.

SAVES OF THE MINING JOURNAL.—We have again to express our regret that we have been unable to supply complete sets—not having a copy of No. 2, and those of No. 3 being very scarce.—We shall esteem it a favour if agents or parties possessing Nos. 1 and 2 would furnish us with them, for which we shall cheerfully pay handsomely.

FRANKFORD AND TYNE RAILWAY COMPANY.—We refer our readers to a paragraph in our present number with reference to this Company.

ALBION MINING COMPANY.—We have received a letter from a correspondent, in which he observes—"I believe the Albion Company is the only concern on which a pig, or I might say a coach-house and stables have been erected," on this, as on other remarks, we at present abstain from any comment.

RAILWAYS.—We have this week to direct attention to the comparative gradients of the three Brighton lines; and a letter on the subject, with Sir R. Peel's observations at a late meeting at Tanyworth, which latter we have been induced to copy from a contemporary at the expressed wish of several of our subscribers, and which, although it has lost its claim to novelty, will be read with interest, and cannot be considered otherwise than worthy of insertion in the Mining Journal, as taking a comprehensive view of the subject generally. We shall next week endeavour to furnish the gradients of some of the other lines, and continue them in our subsequent numbers.

INDEX AND TITLE PAGE.—With our present number will be given an Index and Title Page, which will convey a general view of the objects to which the columns of the Mining Journal are devoted.

LEAVE MESS.—We have been disappointed in not receiving the communication of our Dublin correspondent.

It is informed we are anxious to afford the information as he is to acquire it. Will he point out the way?

REARITIES.—We are much indebted to several correspondents for their offers of contribution in this department, but more particularly to F. G., who has favoured us with a series of papers on Spain, to be followed by others of a like nature relating to other countries. In our present number will be found the first of these series.

The letter of Mr. W. J. Henwood, of Penzance, on the subject of Steam Power did not reach us until this morning, although dated the 2nd inst., the insertion of which is necessarily deferred until our next.

THE MINING JOURNAL AND COMMERCIAL GAZETTE.

LONDON, January 9, 1826.

In our last Number we felt called upon to make some observations on the formation of Companies, and more particularly on the self-nomination of Directors, who, as we had occasion to observe, were, in many instances, merchants intimately connected with the county of Cornwall, and interested in supplying the mines;—obtaining, also, as they contemplate doing, a purchase money for mines heretofore unsuccessful in working, which, if they cannot get the public to join in, would otherwise be abandoned: we beg to assure our readers there is no vice in our observations.

We do not, however, wish to be considered as unmindful of our friends at home, who, if we did not notice their movements might think they were forgotten;—therefore we propose,

on the present occasion, to notice the way in which matters are managed in London; and although many opportunities present themselves, the corporation of the city of London claims a pre-eminence of notice.

It is not our province to touch on politics, or to meddle with corporations; and therefore the House of Commons and the Aldermanic body of the city of London are not subjects to which we ever dreamed our attention would be directed; but, a Prospectus has been put in our hands, in which we find that a worthy and respected alderman, one of the representatives of this city, is chairman of a board of directors of a Scrip Company, with a nominal capital of £20,000, which is about being formed; and with whom are associated another worthy alderman and five other gentlemen of undoubted respectability.

It is not our intention to make any observations on the value of the Mine, for well assured we feel, that without the gentlemen forming the direction were well satisfied that the concern was one which justified the outlay of capital, they would not connect themselves with the adventure; while we are also satisfied that some of the gentlemen possess not a trifling knowledge of mining operations.

The Prospectus of the Company will therefore form the subject of our remarks, and we shall not hesitate to express our opinions thereon, feeling, as we do, that by the formation of companies of this nature discredit is thrown on mining operations generally. Let us now see—Here is a company, capital £20,000, in 2000 shares of £10 each; deposit £5 per share. The present proprietors of the mine (query, who are they?) having "agreed to part with one-half their interest in consideration of receiving one thousand shares, bearing thereon an acknowledgment of the satisfaction or payment of £5 per share having been made." Such is the offer of the present proprietors; but as there are generally two parties to a bargain, we presume they mean that they intend to take if the public agree to give. Now we doubt not but that the property is worth all the money, more particularly as the mine "may be said to be in a *miner's* like state for extensive and profitable operation," and that there are "encouraging indications."

The most important point however in this prospectus is the statement, that a capital of £5,000. "it is presumed will be amply sufficient"—so that we have here two aldermen, one being a member of parliament, and five other gentlemen of the first respectability, forming a Board of Direction; one solicitor, two bankers, one secretary, one manager, and one inspecting agent, not to speak of the subs, and a very well set out prospectus, with the names of these several parties, put forward to raise the Sum of £5,000. Why, if the directors themselves seven in number (we do not know what salaries they may have resolved on taking) have not sufficient confidence in the adventure to embark, and induce their friends to do so, what opinion can the public form when a prospectus of this nature to raise £5,000. is laid before them?

The absence of the names of auditors, and any reference to rules and regulations by which the Company is governed or to be governed, may, perhaps, as well as the qualification of Directors, be deemed as hardly worthy of the attention of the public by the Board of Directors; the Chairman, of whom, if we mistake not, has lately, to the satisfaction of his fellow citizens, been appointed to a Governorship, as well as the Chairmanship of the Company now under notice.

We are not aware whether the Shares of the Company have been all taken up or appropriated, as the *closing* words of the prospectus are, that the "List will be closed at the earliest opportunity." We must therefore refer our subscribers to the Court of Aldermen or the office of the Company for further information, having, as we consider, done our duty in affording them an opportunity of deriving "a proportionate benefit" from the working of the mines—if that they take shares.—We are not prepared to say whether we *would* or we *would* not.

Since writing the foregoing we have to acknowledge being favoured with a copy of the rules and regulations which are endorsed on the Scrip Certificates or Shares, but which, however, by the bye, no one can see until he has paid his deposit. They appear to be far less objectionable than many which have come before us, and as we find that the directors are to meet at least once a month (which, by the bye, admits of their devoting each one hour and a half per day, as in the case of a Company we had occasion to mention, the Directors taking £150. per annum each) we are, however, induced to hope they will consider themselves in some degree as a nominal board, and that their salaries will be nominal, or in proportion to their labours. We find the qualification of a Director is 50 Shares; this is, for the seven, 350 out of the 1000 to be disposed of. Now, if each director can manage to get two friends to take an equal number, the job is done, and then why the necessity of wasting money in printing and advertising? However our conscience is not burdened on that account.

* Query—Minor, Printer's devil.

From a statement made in "The Times" of yesterday, it would appear that the "New Companies brought forward in the past year, represent a capital of nearly £48,000,000," which the Editor observes does "not fall much short of the capital of those formed in 1825," and "it is probable that a very large proportion of them will never be paid up." We admit the talent and ability of our contemporary, at the same time we profess to be more familiar with the subject to which his attention has in this instance been directed.

From the article to which we refer it appears, that the capital of the Mining Companies of 1825 is, £2,944,000.—Railway companies, 34,040,000. Miscellaneous, £19,811,000 making as before observed, nearly £48,000,000. The observation that this sum amounts to nearly that of the speculations of 1825, (whereby the reader would, without reference to documents, be perhaps induced to draw the deduction, that the public were as wild now as then,) is far from correct, as the subjoined extract from a pamphlet published in 1827, by the Editor of the Mining Journal, will at once show. The speculations of the past year, assuming "The Times" to be correct as to their amount (for we have not time for our present Number to check his estimates) does not much exceed one-eighth of those of 1825, which amounted to £372,173,100 divided into 5,263,220 shares; and in 1827, the capital of the then existing companies alone was £102,781,600; the amount of calls paid being £16,885,950 exclusive of premiums.

We have not space on the present occasion to enter more fully into the subject, but shall content ourselves by making the extract referred to.

SUMMARY OF THE COMPANIES FORMED IN 1824 AND 5 (enumerated in the pamphlet in detail.)

	CAPITAL.	SHARES.
74 Mining Companies	38,370,000	537,300
29 Gas	12,077,000	200,940
20 Insurance ditto	35,820,000	651,000
28 Investment ditto	52,600,000	686,500
54 Canal Rail Road, &c	44,051,000	542,210
67 Steam	8,555,500	125,220
11 Trading	10,450,000	85,000
26 Building	13,781,000	164,900
23 Provision	8,360,000	674,000
49 Miscellaneous—Existing	38,824,600	562,500
43 Ditto	20,409,000	390,250
57 Ditto	19,700,000	382,600
143 Ditto	69,175,000	959,000
624	£372,173,100	5,963,220

THE FUNDS. CITY.—FRIDAY.

The change of character from stagnation to activity, which the funds have exhibited since about the 28th December, has continued to be the principal feature during the past week.

Consols were on Saturday at 92½; on Tuesday they reached 93½; after which they declined to 92½ on Thursday; and they close this evening at 92½, or 91½ ex-dividend. The public dividends for the half year (ended 5th instant) upon Consols; new 3½ per cents January Annuities, &c. &c. commenced payment this morning.

The rise of the Funds has certainly been caused by the mediation of this country between France and the United States, which has been lately offered to, and accepted by the former; the dispute has always, in fact, appeared to rest rather upon a point of honor than upon any determination of France to refuse payment of the money, and as every expression of regard for the honor of France, which could be reasonably required, has been given in the president's message to congress the public opinion is, that the dispute is at an end.

Added to this cause is the high tone of confidence prevailing here on account of the really sound and healthy state of our commerce and manufactures, and the abundance of money, which as it arises, from the payments of Government of the indemnity due to the West India Planters, appears to be freely invested in almost all the funded securities of respectable character, and chiefly hitherto in the British Funds.

There is also an opinion generally prevalent that the alliance existing between France and England is at present more intimate and sincere than it has ever yet been; and that the former has at length taken effectual means for blockading the passes of the Pyrenees, so far as to prevent as much as possible, any communicating with the Spanish Carlists.

The reaction which took place some days ago in Consols and Spanish Bonds was owing to the sudden rise of the former, and to their high range of quotation which checks the desire of the public for investment in them. In the latter it was chiefly owing to the considerable and sudden rise which had taken place, particularly above 50 and 51 limits; while the Spanish Bonds have had so much difficulty in surmounting since the panic which occurred in May last.

Exchequer Bills and East India Bonds have also risen, the former considerably, the public appearing to prefer a temporary frackage of Exchequer Bills to any investment in consols at present prices, independently however of the reaction which occurs naturally in consols after any rise upon the present quotations, it is certain that the temporary decline which took place, is to be attributed to the caution of capitalists and speculators, inspired by the severe remarks which appear in those newspapers supposed to be most in the confidence of government. These remarks have exchanged their former character of accusations on the subject of Poland to that of menaces on the question of Turkey. This feeling has been increased of late by the appearance of articles in German papers under the controul of Austria; and by the publication here during the last 5 weeks, of a weekly periodical called the Portfolio, in which are published letters and documents professing to be copies of those transmitted at various times during the last 5 or 10 years by the Russian ambassador here to his government.

If these articles be as they seem, genuine, their appearance in this public form accounts for the suspicion which is entertained in the city, that our relations with Russia are upon the most unfriendly footing; it is also evident that the papers must have been procured originally by clandestine means, and that their present publication must be encouraged by high authority. The opinion gains ground that England, France, and Austria are thoroughly agreed upon the subject of the Dardanelles. These powers, if united, are obviously too strong to be resisted, and finding Russia positively weak, and unable to act in the South on account of the great military force which she is obliged to maintain in Poland, they appear resolved to break up by force the treaty of Skellebi, imposed in 1833, by Russia upon Turkey; to occupy the forts on the Dardanelles, and to provide for the freedom of the Danube, which they are resolved shall not be interfered with by Russia. Notwithstanding this, or, perhaps, in consequence of the belief that all the power is on the side of the allies, and all the weakness on the side of Russia; it is expected in the city that although there may be some display of force, yet that Russia would submit, and that no rupture of the peace will take place. Whatever confidence may exist upon this result, it seems certain from the manner in which the public mind of the west of Europe has been for some time prepared by the newspapers, that much caution ought to be used by the mercantile classes, especially in their speculating in the public funds.

If, on the other hand, the opening of Parliament dispels the doubts which hang over the question of our relations with Russia, it is confidently expected that the French Government will bring forward a project for an ultimate reduction of the interest on the 5 per cent. debt, by exchanging 100 5 per cent. for 100 4 per cent., and by adding also an annuity of £1 per cent. during a fixed period of 10 years.

Spanish Bonds have, as usual, varied considerably during the week. They commenced on Saturday at 50½; touched 51½ on Wednesday, and declined the same day to 49½. They opened this morning at 50½; rose about 12 o'clock to 50½ on the arrival of an express from Paris, bringing intelligence of a rise in the Spanish Funds, and they close this evening firmly at 50½, 51½.

Within the last ten days these Bonds have been supported by many resolute purchasers, and the motives by which they have been guided appear to be, that they consider Mr. Mendizabal's government strong and energetic; that the reinforcement to the army of the Ebro are actively promoted; and that the struggle in Biscay will therefore terminate this Spring in the final triumph of the Queen's cause, and the expulsion of Don Carlos.

In addition to the prevalence of these opinions there are rumours on respectable authority, that a treaty of Commerce has been signed between England and Spain, by which all ships and merchandise will enter the Spanish ports on the same footing. This, if true, will be of the greatest advantage to Spain herself, and not less so to England, our trade with Spain having been for many years, especially since 1823, subjected to discriminating duties, by which our shipping and manufactures were unfairly excluded.

It is also stated this morning, that the vote of confidence in Mr. Mendizabal's ministry has been passed by a great majority in the Chambers. The continued statements of the minister, that he will be able to provide for the extraordinary expenses by which the Spanish government is just now burthened by the insurrection in Biscay, without recurring to fresh loans or taxes, excites surprise: there is, however, a rumour again to day, that in consequence of the Commercial Treaty between the two countries, the British ministry is inclined to propose to Parliament that a loan for two millions sterling for Spain shall be guaranteed by England. France declines all participation, having no interest to induce her, and having also suffered much loss in consequence of her guarantees of 1823 and 1824, when Ferdinand and the Church party were restored by the arms of France.

CITY, 12 o'clock.—Consols for account, 92½; Feb. Account 92½; 3 per Cent. Red. 91½; Exchequer Bills, 2s. 1s. 3s.; East India Bonds 5, 7 pm.; Belgian 5 per Cent., 101½; Portuguese 3 per Cent., 84½; Spanish 5 per Cent., 50½; Deferred, 25½; Passive, 60½; Mexican, 38½; London and Birmingham Railway, 51, 3 pm.; Greenwich, 54, 2½ pm.; Great Western, 13, 14 pm.; North Midland, 34, 4½ pm.; Danube and Mayne Canal, 1 dis. par.; United Mexican, 34, 4½; London and Westminster Bank, 4, 1 pm.

MINING STATISTICS.

NORTH ROSKEAR.

This mine is situated in the parish of Camborne, to the north of the western road. It is on the manor of Roskear, and the county of Cornwall. E. W. W. Pendarves, Esq., is lord of the soil. It is a new mine, having commenced working about twenty years since. It includes, however, the old mines of Prince William Henry on the west, and of the Croft and Wheal Knight on the east; the two former are on the Roskear lode, and the latter is on a lode running in a parallel direction at some little distance to the south. The operations commenced at Prince William Henry, where the deep adit was commenced on what they then considered to be the lode, but which certainly proved more the appearance of a slide or of a quarry, being what is locally termed "a great paunch killas." Having driven on this course for about 300 fathoms, they met with a cross-course, on which they drove south, and soon intersected the lode, on which they commenced driving. They had not driven far on the course of the lode before it became productive, and, continuing to improve in its progress eastward, it was found necessary to sink a shaft on it for the purpose of drawing the water, and for ventilation. On holing this shaft, the adit level was extended eastward, and continued to improve; and, having driven several fathoms through a good course of ore, which appeared to improve as it went down, another shaft was commenced to intersect the lode at a deeper level, and means were provided for effecting the drainage. The adit continued to improve so much as the operations were extended, not only in an eastern direction, and going down, but also on being opened to the west, of the cross-course, that the small presser was soon superseded by a more powerful steam-engine, and the mine quickly became one of the most productive in the neighbourhood. In consequence of the excessive hardness of the ground the operations were not prosecuted so rapidly as many other mines; and, being attended with much more cost, the profits must, of course, be proportionally less. We are confident were they, however, in the resources of this valuable lode, that, instead of endeavouring to make the greatest possible profit at the least possible expense—as is too frequently the case in mining—they prosecuted their operations on an extensive, fair, and approved system. As an instance in illustration of this we notice the new perpendicular engine-shaft, calculated to intersect the lode at a depth exceeded by few others in Cornwall. This shaft had to be sunk the greater part of the way through an excessively hard channel of ironstone; and we are informed that its expense will be little—if at all—less than thirty thousand pounds.

(To be continued.)

MINING CORRESPONDENCE.

ENGLISH MINES.

NORTH CORNWALL MINING COMPANY, Wheal Thomas, Jan. 2, 1836.—In surveying the mines this day, we are proud to say that we found the lode at the 17 fathom level much improved, worth from £20 to £30 per fathom, with a very fine strata of ground, and from the present appearance of the lode and its situation, we consider that a greater improvement may be long expected. In the 8 fathom level end, east, the lode produces some lead, but not rich; the end west, at same level, the lode is improved in size, with a little lead. **Wheal Hope.**—The lode at the adit level in this mine is about 18 inches wide, with a more promising strata of ground than we have seen for some time, lode poor; in the 12 fathom level the lode is 2 feet wide, composed of spar, gossan, and mudiic, with some lead, but not enough to pay for saving; in 20 fathom level, lode about 10 inches wide; this lode has yielded some good stones of lead this week, and a greater quantity we expect soon. We have got our footway down to the 28 fathom level; this level appears to be standing very well; expect the water will be unworked by Monday morning 40 fathoms under adit, when we shall immediately prepare to drop 10 fathoms deeper. Our setting took place this day, and we set an end to drive south, from engine shaft at Wheal Thomas, 17 fathom level, to cut other south lodes; the particulars of this, and of our other bargains, will be given you in setting report. We have sent to a box containing 2 stones of lead, that we consider a fair sample of the lode at Wheal Thomas, 17 fathom level. JOHN BORSARE.

HAYLE CONSOLIDATED MINING COMPANY, Jan. 4, 1836.—We have deared to the bottom of Ellwand's shaft, but have not been able to examine the workings westward, they being entirely full with rubbish and mud to the adit level. We are driving laths, and clearing as fast as possible, and my next will, I hope, give you information relative to the state of the greatest part of the workings, if not of the whole. In the eastern part, which was left higher, and which we suppose was not worth the notice of the former party, they having other parts much richer, there is a branch worth for tin, as per assay this morning, £7 per fathom; it also contains copper, and the expense of spending the ground will not exceed 40s. per fathom. This alone affords us great encouragement, but we expect to find it much better as we clear westward, where the workings are large, and where reports say they are sunk deeper than the bottom of our present engine shaft.

Trividgia mine still looks favourable; we have now driven the tin west from Lyon's shaft, in all 13 fathoms, and have not had one fathom of unproductive ground in the whole; and now that the winze (partly sunk by the former adventurers) is holed, we find, as I had always suspected was the case, that the south part of the lode, which in our driving has been the most productive part, is left in the winze from the adit to the 10 fm level, and should it turn out equal to that level, we shall by and by find a good sum in it, but for the present we cannot return more than the 10 fm level itself will produce. At Hayle Conols we are going on as fast as possible with our preparatory works. The main beam is cast, the boiler is made, and I am promised that the whole of the engine shall be completed very shortly. I am anxious to see her working, that we may give an effectual trial to this mine, which in the opinion of many will ultimately turn out the best of the three.

ROCHE ROCK MINING COMPANY, Jan. 4, 1836.—The 20 fathom level on the north lode is in softer killas, and looks very promising. There is some good tin stuff raising at the 30 fathom level, east of Fagan's shaft. The 40 fathom level east on the north lode is improved, ground softer, and the quantity of tin increased. The cross cut at this level to intersect the new lode has been extended 4 fathoms in the last week; it is expected to reach the lode in the present week. The 60 fathom level having been extended 15 fathoms west of the engine shaft on the south lode, a rise will now be made to the 50 fathom level, which will open a piece of tin ground to set on tribute. The rise on the back of this level east of the engine shaft continues to produce good tin stuff, and the two pitches set at 5s. 9d. in the pound, are regularly wrought. The ground on the north lode has become harder. The following statistical account will enable you to judge of the increased value of the tin stuff raising in the mine:—

	No. of kibbles drawn.	White tin sold.				Value per 100 kibbles.	Amount of monthly sales.
		tons.	cwt.	qrs.	lbs.	£ s d	£ s d
1835. Sept.	5041	5	17	0	0	5 8 0	237 11 6
Oct.	6552	6	11	0	17	5 16 0	365 19 2
Nov.	4892	6	0	0	15	6 6 0	400 6 11

J. TRESTRAIL.

BRITISH TIN MINING COMPANY, Jan. 4, 1836.—The ground in our cross-cut north at the 12 fathom level is much improved since our last report. We supposed, from the appearance of the ground, as stated in our last report, that we were near the lode which we expect to intersect next, being the lode on which there has been so much working in the bottom of the adit, but on dialling the ground at the adit level, and supposing the old men cut the lode at 5 fathoms below the adit in the winze, and the lode keeps its regular underlay, we shall then have from 3 to 4 fms. to drive, to intersect it. The water is gradually sinking in the winzes, and we intend clearing up the winze sunk on the counter lode immediately, and shall continue to sink it, if it can be done without a water charge. We are excavating the plait at the 12 fathom level as fast as possible, and so soon as this is done we shall commence driving east and west on the course of Fagan's lode, and on the little lode which we intersected about 6 or 7 feet from Fagan's lode, which has a promising appearance. Fagan's lode is the greater part of the ground we have to cut on, breaking the plait, and will give us some tolerable work. The pitch on Fagan's lode is just as our last week's report stated. The ground in the adit end on Dyer's lode is much the same as last week.

R. R. GRACE, G. BRAY.

NEW CRIBBIS MINES, Dec. 26, 1835.—This being the regular measuring and setting day for these mines, we have been underground, have measured the bargains, and by mutual agreement have set such things as appear to us most desirable to be done under the present limited mode of working. The ground excavated in the past month is as follows, viz.—engine shaft, sunk about 4 ft. 6 in., not set in consequence of water being in, therefore it could not be seen, the wheel being impeded by the frost. The 55 fathom level west driven 2 fathoms 3 feet 9 inches, have this day set to discover the lode to the bottom of the level, preparatory to taking down the lode at 45s. per bargain. The 55 east driven 3 fathoms 4 ft. 6 in., have also set a similar bargain, as in the west end at 45s. and intend to have the lode taken down as soon as these bargains shall have been finished. The rise in the back of 55 has been risen 1 fathom 2 ft. 6 in., now set at 60s. per fathom. This rise is in the killas under the lode. The winze under the 45 sank 2 fathoms 3 ft. 0 in. now set at 60s. This is also in the killas under the lode for the sake of communicating as quick as possible. The 32 fathom level east on new lode has been driven 1 fathom 5 ft., now set at 60s. per fathom; this end produces some tin, but is not rich. The 45 east has been driven 1 fathom 3 ft., set at 65s.; this end also produces some tin, and is very kindly. The back of 45 under the lode stopped 6 fathoms 3 ft., and the lode taken down to the height of the present back for £12, and as the lode is now softer than usual, we have set to rise on the lode at 40s. per fathom; the lode still produces tin stuff of the same quality as for some time past, which can now be raised at a less price. On a branch at the 22 fathom level, we have driven 2 fathoms 2 ft. 10 in., but have now suspended it, and intend to put the men to work on the main lode at the 22; we have set one pitch in the back of the 32 fathom level, at 12s.; and one in the bottom of the 12 fathom level at 13s. 4d. We hope to resume sinking the engine shaft in a few days.

W. PAUL R. RODDA.

TRELEIGH, Jan. 2, 1836.—In the last month we have excavated the different levels, &c. as under. In the engine shaft the men have sunk 1 fathom 8 inches, the ground has been, and is, rather hard, but you will perceive we expect a change by our setting 3 feet only. The risemen have nearly holed to the winze. The ground spent by both parties is 6 fathoms 2 feet 2 inches. We have set a pitch in this place, and the end on this level we have set again. In the shallow adit on this lode they have driven 3 fathoms 3 feet 4 inches; the lode is large and kindly, although at present very little ore, but a fine gossan. The adit level or Wheal Shanger is driven this month 4 fathoms 4 feet 5 inches, the lode is large and has a good appearance with a little ore, but opposite the shaft from the new cross-cut we have a large lode, and much better than we calculated upon, *all saving work for 3 feet wide.* In the adit on Wheal Christie lode, we have extended this month 4 fathoms 2 feet 4 inches; the lode continues its full size, and is of a more promising appearance, although not rich for ore. The end at the shallow adit east of the engine shaft continues to look well, the men have driven this level nearly 5 fathoms. The adit level on the south lode, the lode is 4 feet wide, and promising to be productive, the men have extended this level 5 fathoms 1 foot 9 inches.

W. SINCOCK.

Jan. 5, 1836.—I am happy to say, that Captain Sincock has just informed me, that they have holed the winze, and, in addition to the two pitches at five shillings in the pound tribute, set on Friday, that he has set a third at the same price. This must prove as gratifying to you as to us; in fact, we seem to meet with ore every where, we are rising and dressing it, having built a very decent brick house in front of the account house, and made a small dressing floor, on which we have already three piles of ore: so you see we shall make good the promise of sampling before the engine goes to work. SAMUEL CARDOZO, JUN.

REDRUTH UNITED MINING ASSOCIATION, Jan. 4, 1836.—The lode in the engine shaft is about 4 feet wide at present—has a more favourable appearance for copper than tin, having in it a small quantity of rich copper ores. The lode in the 32 fathom level west of the engine shaft has a more favourable appearance than it had a week since, having dredge-stones of copper ores in it, and of a large size. The lode in the 32 fathom level east of the engine shaft is about 4 feet wide, producing tin ores. The lode in the 22 fathom level east of the engine shaft is about 34 feet wide, producing tin ores. The lode in the 12 fathom level east of the engine shaft is about 3 feet wide, producing tin ores. The lode in the rise against Cock's shaft is about 3 feet wide, not rich. The lode in the rise against Gooding's shaft is about 3 feet wide, producing a small quantity of tin ores. The lode in the level east of Gooding's shaft is about one foot wide, not rich. The lode in Gooding's shaft is about 4 feet wide, producing tin ores. We are continuing to sink Cock's shaft, and expect to cut the lode in about a fortnight. At Buckett's we are continuing to drive the adit level on the branch, which continues to produce a small quantity of copper ores. Here, and at Clijah, we are getting on with the flat rods, and other work, as expeditiously as possible.

R. GOLDSWORTHY.

ST. HILARY MINING COMPANY, Jan. 2, 1836.—We have driven the 20 fathom level south of the new engine shaft something better than 4 fathoms, so that we have driven about the distance we calculate to communicate with the former workings, and as the men have a body of water before and above them 20 fathoms high, I have directed every precaution to be taken, so that no accident may occur in our approaching it, and I confidently hope and expect, that I shall have the satisfaction to announce to you next week, that we have accomplished it, and that the whole of the mine to that depth is entirely unwatered. The sump men have this week been engaged in making preparations for putting in borers and a cistern at the 20 fathom level, and in squaring down the shaft to its present bottom 21 fathoms, which when done, we shall be enabled to proceed at once, and sink the shaft to the bottom of the mine without difficulty or interruption.

C. N. BEATER.

ALBION MINING COMPANY, Jan. 5, 1836.—Since my last I am glad to state the lode in the 60 fathom level east, from the cross cut on the caunting lode is much improved both in appearance and quality, at present it will produce about 2 tons per fathom. The lode in the 60 fathom level west from engine shaft is about 4 feet wide, producing a little ore with a kindly spar—the appearance of this lode is improved within the last few days. The lode in the winze under the 47 fathom level west from engine shaft, is 4 feet wide, still producing a small branch of ore towards the west end. I cannot see any alteration in any other levels in the mine since my last report, but find the water in the mine to be on the increase pretty much—our engine is drawing 655 gallons per minute. We have seen the lode at the bottom of Wheal Mithian engine shaft, about 8 feet wide—have not seen the north wall as yet, it produces a large portion of mudiic, spar, &c. The lode in the 40 fathom west from engine shaft is 5 feet wide, poor. The lode in the 30 fathom level east from engine shaft is at present rather small, but has a kindly appearance. The lode in the 40 fathom level east from engine shaft is 4 feet wide, producing a great deal of mudiic and stones of ore. J. MIDDLTON.

TAMAR SILVER LEAD MINING COMPANY, Jan. 4, 1836.—The steam pumping engine commenced working this morning in the most satisfactory style.

THOMAS PETHERICK.

POLBREEN MINING COMPANY, Jan. 4, 1836.—The progress we have made this week (in this mine) in our different operations, will not afford anything but a repetition of my last, which report I beg to refer you to.

R. ROWE, JUN.

EAST WHEAL STRAWBERRY MINING COMPANY, Jan. 4, 1836.—The ground in Grou's engine and whim shafts is more favourable for sinking them speedily since my last report, and the cross cuts at the 15 fathoms level north and south of those shafts, to cut Trewhith north and south lodes are extending in favourable killas. In the other parts of this mine there is nothing new to notice since the 25th ult.

WILLIAM PETHERICK.

PERRAN CONSOLES MINING COMPANY, Jan. 4, 1836.—We are getting on with our work in the engine shaft, and shall commence to sink below the adit as soon as possible. Mudge's lode is still large in the eastern end at the adit level, but does not contain so much lead ore as it did last week. We have not yet seen Anthony's lode, in the cross cut, which we are driving northward from Mudge's lode, but the alteration in the ground indicates that we are drawing nigh to it. Westward on this lode we have a promising lode composed of lead, mudiic, and white spar. The masons are making good progress with the engine house, &c.

JAMES GRIFE.

SOUTH WHEAL LEISURE MINING COMPANY, Jan. 2, 1836.—We find but very little alteration in the ground in our engine shaft, the water however is increasing, but we hope this month to complete a 10 fathom level below adit. The walls of the counting-house are finished, and all other erections are in a forward state.

R. ROWE, JUN.

REDRUTH CONSOLES MINING COMPANY, Jan. 4, 1836.—The ground, in extending the 30 and 30 fathom levels east of Johnson's shaft to cut the lead lode, continues as stated in my last report. We are sinking the Double Whim shaft below the 10 fathom level on Johnson's lode,

which is large and promising. The engine shaft is sinking in Killas rather more favourable than noticed in my last. In extending the adit north of the North Whim shaft to cut the Holmbush lodes, the killas is of a promising description, though a little harder than we have hitherto experienced, but I consider this alteration to be temporary.

WM. PETHERICK.

EAST CORNWALL SILVER MINING COMPANY, Jan. 4, 1836.—I beg to inform you that our monthly setting took place on Saturday last, 3d inst. We sat a new shaft on Wheal David adit, 70 fathom west of Gilbard's shaft by 4 men, to be called Stainsby's shaft, and which will require a cross-cut north of 5 fathoms, to cut the lode at the adit level, price £15 per 10 fathom. The Wheal David adit end was set at 30s. per fathom stent, 10 fathoms or the month by 6 men.—Wheal Georgians adit end east was set to 4 men at 45s. per fathom, stent 8 fathom or the month.—Wheal Emily adit end west was resumed and set to 4 men at 45s. per fathom, stent 3 fathom or the month.—Wheal Virgin adit end has been stopped and also the rise, and the men put to drive a cross-cut from the adit to come under Snell's shaft, at 60s. per fathom, by 6 men, stent 2 fathom and 4 feet. This stent will come immediately under the shaft, from whence we shall begin to rise. The lodes in Wheal David end are again taking off or separating from each other—they are both kindly. The south lode 18 inches big with a leader of spar, mudiic, copper, and silver. The north lode is from 2½ to 3 ft. big, composed of spar, mudiic iron and silver. Wheal Georgians adit end is kindly for silver, whole lode 32 inches big, and leader about 6 inches big. Wheal Emily adit end has not been touched since our report of the 21st ult.; it is remarkably promising. Wheal Virgin adit end has been stopped for want of air, being full 126 fathom from Warwick's shaft, both the end and back are very kindly. We have had no further account about our castings for the engine. Our capstan rope has been brought on the mine this evening.

J. BUDGE.

ENGLISH MINING COMPANY, Great St. George, Jan. 5, 1836.—You have accompanying the usual documents for the month of November, and the setting reports for January, 1836; by the latter you will see that 8 men pitches have been set. In any further information in this or in the twotwork department of the mines, I must beg to refer you to the reports. We sample to-day 317 tons.

BRITISH COPPER MINING COMPANY, Jan. 6, 1836.—I find that we have opened on the course of the lode in the 32 fathoms level 32 fathoms 4 feet 8 inches; in the 42, 13 fathoms 4 feet; and have sunk in the New Western shaft, 26 fathoms. The lode in the end and back of the 42 east, and also in the back of the 42 west is from 3 to 5 feet big, and will produce on an average about 2½ tons of ore per fathom. The lode in the 42 west is 6 feet wide, exceedingly hard, and will produce 2 tons per fathom. The lode in the end and back of the 52 west is from 8 to 10 feet big, the whole of the lode is very hard. The lode in the back of the 52 east is 4 fathoms wide, with 3 tons per fathom; in the end it is much improved, being 3 feet wide, a great deal softer and kinder than it has been in any part of the lode we have opened to the south of the slide. After minutely examining every part of the mine on Friday last, the day before our setting, I concluded in my own mind, that the appearances are much better than they have been from the commencement, or, in the language of one of the labourers, "the best vein this working." The general hardness of this lode seems to be the only thing against us. Enclosed you have an account of the sale of a small parcel of tin, you will, therefore, debit me in my account current with 46l. 2s. 1d. JAMES STEPHENS.

FOREIGN MINES.

BRAZILIAN MINING COMPANY, St. Antonio, Oct. 18, 1835.—We continue to proceed in the mine as detailed in my last. The north-west end is now only one foot wide. The walls are yet most defined, therefore hope it will again open out; the stopes present the same favourable appearance. Enclosed, I beg to hand you Gold Report from the 4th to the 17th inclusive:—

Gold return from 4th to 17th Oct. inclusive. 11lbs. 1oz. 4dwts. 21grs.

IMPERIAL BRAZILIAN MINING COMPANY, Congo Mine, Sept. 9, 1835.—Since our report of the 29th ultimo, our gold produce for the washing-house has been from the bottom of the 34 fathom level, east of Lyon's shaft, and from the back of the 14 fathom level, west of Goldsmid's shaft, the stuff from these, and all the other backs now working, are put to the stamps. Since our last, we have met with the soft channel of ground in the 48 fathom level, so that we were obliged to stop the end mentioned in our last, and bring the men back about 9 feet, to commence a new end a little further to the west; we still hope, in a short time, to communicate this level with Skerrett's shaft. In the 21 and 14 fathom levels, west of Aveline's shaft, we have favourable ground, and the vein shows a little gold from these ends. In the 21 and 14 fathom levels, west of Williams' shaft, the vein is poor. The 27, east and west of Stokes' shaft, the vein shows a little gold. We put some of the stuff from these ends to the stamps, and it produced a little gold. Since our last, we have commenced a rise from the north cross cut, east of Bayly's shaft, in the 41 fathom level, to prove the jacotiga in that part of the mine. We are still clearing the 7 fathom level, east and west of Shore's shaft; the stuff from these places pays well for stamping. At the "Preza Grande," we have still the same number of English and black men there, but we think to complete this work in 3 or 4 days more.

WM. TREGONING.—WM. BRAY.—WM. COLLINGS.

Sept. 19, 1835.—Since the date of our last report, which was on the 9th inst., our produce of gold for the washing house has been from precisely the same places as therein mentioned, and we have still a little gold in sight in the bottom of the 34 fathom level, east of Lyon's shaft, the other backs now at work are poor, but produce gold at the stamps. The shaft which we are now clearing from the 7 fathom level, and from the 21 fathom level, at Aveline's shaft, formerly broken, answers well at the stamps. The ground in the end of the 48 fathom level cross cut, towards Skerrett's shaft, is at present very soft, but we are still able to proceed slowly therewith. There is no alteration to notice in reference to the other parts of the mine.

WM. TREGONING.—N. HARRIS.

Gongo Soco, Sept. 29, 1835.—Since our report of the 19th inst., our gold produce has been chiefly from the bottom of the 34 fathom level, east of Lyon's shaft, and from the back of the 14 fathom level, west of Goldsmid's shaft. From the other backs now working, we have no gold at present for the washing-house, although the stuff from those backs produces gold at the stamps. In the 48 fathom level cross cut, towards Skerrett's shaft, we are obliged to stop the two ends, which were about 2 fathoms apart, in consequence of the wet and soft ground. On the 23rd inst. we commenced another end between the above-mentioned ends, hoping these ends will have some effect towards draining our present end now at work; there is about 3 fathoms more to drive to reach the shaft. In the 21 fathom level, west of Aveline's shaft, we have a vein that shows a good sample of gold, also, in the 27 fathom level, east of Stokes' shaft, shows a sample of gold when washed. At present, we have no other particulars to communicate.

WM. TREGONING.—WM. BRAY.—WM. COLLINGS.

Gongo Mine, Oct. 1, 1835.—Permit us to lay before you a statement of the works performed in this mine during the last month, with reference to the ground wrought out in the backs, bottoms, ends, &c., during the two preceding months. The bottom of the 34 fathom level east of Lyon's shaft north lode, has been the most productive during the last quarter; and we have occasionally a little gold from the stopes, and the stuff from them answers well for stamping; ground wrought out about 24 fathoms. The back of the 14 fathom level west of Goldsmid's shaft has occasionally produced a little gold for the washing-house, and the stuff therefrom pays pretty well at the stamps; ground wrought out in these backs about 37 fathom. The stuff from the undermentioned backs has produced a little gold at the stamps, viz.—that of the 21 fathom level east and west of Goldsmid's, 27, 34, and 41 fathom levels west of Bayley's shaft, back of 34 fathom level north lode, east of Lyon's shaft, and that of the 21 fathom level west of Walker's shaft, ground wrought out and in these backs about 89 fathoms. Opening ground for backs, raising stuff for the stamps, &c. The 21 fathom level west of Williams' shaft—this end during the quarter has been driven 2 fathoms 3 ft., here the jacotiga is poor. The 14 fathom level west of the same shaft has been driven 12 fathoms, here the jacotiga is very poor. A communication has been effected between these two last-mentioned levels by a rise from the former. The 14 fathom level west of Goldsmid's shaft on the north branch has been driven 20 fathoms 2 ft., samples from which have occasionally produced a little gold, and the stuff is all carried to the stamps when we think it continues to pay for stamping. A cross-cut has been driven from Aveline's shaft and holed to the last-mentioned end, a rise has been risen from this to the shallow adit level. The 21 fathom level west of Goldsmid's shaft north branch, has been driven 13 fathoms 5 ft.; this end has been poor, but the shaft from thence produces a little gold at the stamps, a communication has been

effected from this end to Aveline's shaft by a cross-cut. Several hundreds of bibles of stuff have been cleared from the old workings in the back of the 21 ft. level, between Lyon's and Aveline's shafts, which has paid well for stamping. At Shore's shaft the 7 fathom level has been cleared and repaired west 10 fathom 3 ft. and east 8 fathom 3 ft.; the stuff from this level has paid for clearing. The side level in the 34 between Gibson's and Bayly's shafts has been completed. The 27 fathom level at Stoke's shaft on the north part of the jacotinga has been driven west 17 fathoms 1 ft., and east 16 fathom, in both these ends the jacotinga has been poor, but shows a little gold when washed, and produces a little at the stamps. The 41 fathom level east of Bayly's shaft—here we have commenced a rise during last month, in the back of the cross-cut end, on a vein which shows a good sample of gold, and have risen it 5 fathom 4 ft. A new shaft (named John's shaft) has been sunk about 15½ fathoms distant from that of Shore's; it is 14 fathom 3 ft. deep, it is intended to be holed to the 7 fathom level, when we have cleared and repaired it, the level; so far west, as that shaft for the purpose of drawing up the stuff for stamping formerly broken there. A cross-cut has been commenced at the surface during the last month, about 17 fathoms south of Da Gama's shaft; this is intended to take off a stream of water, which at present falls through that shaft into the mine, and greatly impedes our workings in the western banks, it is driven 9 fathom 1 ft.; it is further intended to proceed northward with this cross-cut to prove the north part of the jacotinga.

Skerrett's shaft has been sunk to the horizon of the back of the 48 fathom level. The 48 fathom level: the western end of this level has been driven 3 fathoms 5 feet. A rise has been completed from this to the 41 fathom level cross-cut, and a cross-cut east from the vein which shows a good sample of gold. This cross-cut is 1 fathom 1 foot east from the end above referred to; it has been stopped since the 13th of August last, when we commenced a new cross cut towards Skerrett's shaft in the same horizon. In this cross-cut the ground proved favourable for working for the space of 4½ fathoms, where it proved to be very wet and soft; so much so, as to prevent us from proceeding therewith, when we commenced another end, back from the last mentioned about 1 fathom 5 feet, where the ground was firm. In this end we were able to proceed about 3 fathoms more, provided we could continue driving it. In order to hole it to the shaft, we were again obliged to close up the end, for the same reason as formerly; and at present we are endeavouring to drive an end between the two above mentioned, and even here we find it very difficult to proceed. The additional measurements for your ground plan and sections, with our propositions for the ensuing quarter will, if possible, be prepared against the post of the 19th inst.

W. TREGONING, N. HARRIS,
W. COLLINGS, W. BRAY.

P.S. Oct. 8.—Since the date of the above, our produce of gold for the washing house has been from the back and bottom of the 34 fathom level north lode east of Lyon's shaft. The 48 fathom level cross-cut has become, if possible, more soft; and a large quantity of stuff having from time to time fallen from the back of those cross-cuts in that horizon, so much so, that the ground is crushed even from the 48 to the 34 fathom level; and the last mentioned being the adit which carries off the water drawn from Skerrett's shaft by the engine we are obliged to suspend our workings for the present in the 48 fathom level, and commence a side adit in that of the 34, lest, in case of another run in the back of the 48, it might run down both the present adit and the shaft, and consequently oblige us to stop the engine, the result of which would doubtless be a great disadvantage. We accordingly commenced the side adit yesterday. Not having any thing more very particular to mention, we conclude our letter, having the honour to remain,

W. TREGONING, N. HARRIS,
W. COLLINGS, W. BRAY.

From the 29th September to the 17th October, 1835.—17 days,
lbs. oz. dwts. grs. lbs. oz. dwts. grs.
Stamps—28 7 8 20 In all 54 8 0 21

COLOMBIAN MINING ASSOCIATION, Bogota, Oct. 16, 1835.—We shall have nothing to remit the Board by the present packet, but we confidently expect that, by the ensuing, we shall have the satisfaction of remitting the full amount of the Marmato returns for September; and should any bullion come forward from St. Ana and Pamplona on account of the Board, we shall remit the corresponding part of that also. [The Directors expect that this remittance will amount to about \$15,000 to \$20,000.]

Supia District, Marmato, Sept. 29, 1835.—From Mr. Williamson.—The four leading points mentioned in the extract from the Board's letter embrace the objects to which we have most strenuously to direct our attention; and the Board may rest assured that to the accomplishment of these essential points, we shall principally devote our time and exertions until fairly conquered. The present state of the establishment bears a very pleasing aspect; much, however, is required to be done to place it on a permanently secure and pre-eminently successful footing, to which I feel persuaded it is capable of being brought in the course of time by judicious management and steady perseverance. The weather still continues favourable; it generally rains more or less during the night time, keeping up a full supply of water for the machinery. From the Engineer's report for September, The mills are working well, and are kept in excellent order and regularity of motion. New Dressing Floors. The masons have completed the back wall, and are now employed on the end wall; they will shortly be able to go on with the remaining ties.—From Mr. Williamson, Oct. 6, 1835.—September returns amount to 68 lbs. 8 oz. 5 dwts. of fine gold. Quicksilver consumed amounts to 5.558 oz. troy, or 4.17 parts. Stamp heads at work throughout the month 40½, at 40 blows per minute. The quantity of rough ore stamped 968 tons 11 cwt. Tails..... 100 do. 10 do.

1069 do. 1 do.

being the total stamped during the month. The produce per ton of rough ore and tails, 1542 dwts. Weather continues showery. Stamp heads at work, 35th ultimo to 6th instant, 52 heads at 40 blows per min. From Mr. Degenhardt's report for Sept. Raising Ore. During the month there have been raised and extracted 1099 tons of ore from the Salto mine. Deep Cruzada adits.—The workings in this station are continued with much satisfaction, embracing the views stated in my last. Escalastica End west.—The end of this level, which is now driven nearly 150 fathom into the hill, has reached at the bunch of ore 1 have so many times alluded to in my former reports; and it is with great satisfaction I state, that I have met with a lode during the latter part of the month measuring from 6 to 7 fathom of clean ore. This is so much the more important, as upon the existence of this bunch of the lode, the greatest part of the calculation for raising ore according to my estimate is founded; and there can be now not the least doubt that I have fulfilled the estimate made for 1835. The Escalastica level having a total length of 150 fathoms. I commenced on the 15th of Nov. 1832, and the whole cost for driving this level, including the present month and all expenses for powder and candles, has amounted to \$6,600, or on an average price of \$44 per running fathom. There are, at present, all appearances that this fine bunch of the Cruzada lode will still increase in depth, and that as such it will be met with in the Deep Cruzada adit after it has been driven far enough to meet it.—In San Nicolas End the same bunch of lode is to be seen, now measuring 4 feet of clean but very hard casajo. The lode in the Cruzada end still continues promising; but in Dunstone's End it has decreased. The ground has become very hard.—The Cruzada End now being driven 235 fathoms into the hill, I found air blowing so fast that it was difficult to keep the candle alight. I believe this was owing entirely to a great quantity of water falling at that time through Williamson's rise, about 15 fathoms east of this end. The lode in the Sebastiana End continues poor; but the ground has become more favourable for breaking. In San Pedro and San Jose Ends the ground, as well as the lode, has become much harder, and the latter less promising. Williamson's Rise.—The communication with it and the Sebastiana level was effected on the 18th, by which means a good draft of air was produced in this and San Pedro end.—2nd Cruzada Sink was made to communicate with the San Nicolas level on the 18th; after this communication was effected, 9 natives were immediately ordered to sink the same winze in the bottom of San Nicolas level, in order to meet the fine bunch of ore at present in the Escalastica End, and to lay open workings for extracting the ore.

3rd Cruzada Sink was commenced on the 24th of September, between the 2nd Sink and St. Vincent's Rise, in order to open quick the workings upon the fine bunch of ore at present in St. Nicolas End, for extracting it. Stopes have been and still are continued for breaking ore without any particular occurrence.

English Miners.—I am happy to say that the newly arrived English miners who have joined this establishment during the past month, are on an average a body of picked men; they not only work well, but they work dare. The native miners have also worked regularly and satisfactorily. A great number of Peons are constantly applying for work.

Cuparrossi Lode, and 3 Patagon Lode.—I have surveyed the workings

upon both lodes, and shall state more particulars about the proceedings thereon in my next, and only add that, although the lode in the Cuparrossi Adit Level End has quite disappeared, it is not yet discontinued. The Cuparrossi Adit Level has taken a sudden turn, and has become, within the last few days, somewhat promising.

The San Antonio End, which has been discontinued since May, 1834, I again commenced driving on the 18th; the lode has become a little more promising than formerly, and consists of one foot of fine Pyrites mixed with Caliche.

The San Antonio Cross-cut South, which was discontinued on the 27th of July, 1832, vide my Report of the 2nd of August, 1832, on account of having cut into the San Antonio or Patagon Lode, I have again continued since the 18th, as I had found, by my survey, that the cut at that time being reported to be five feet wide, consisted entirely of Caliche, mixed with a fine grained branch of Pyrites is not the Patagon Lode, nor the same lode, upon which the present San Antonio End is driven. I shall, in my next, be able to state more about it.

4th Candado Lode.—The Acquia Level Shaft has been sunk again 2 fathoms; the ground is favourable for driving and requires timbering. I think in 2 fathoms more we shall meet with the main Candado Lode. The heat still continues excessive.

Add Level.—The northern branch in this level has been proved, as I stated before, to be not worth noticing. In the present end, another lode has been cut, and I rather think it is the main lode, although, according to the survey, it ought not to be so; still it may be so, if the lode has taken a greater underlay, of which I shall get some more information in this month.

Reduction Officer's Report for September.—The operations in this department for September, have produced 10 ingots, which weigh together 106 lbs. 4 oz. 13 dwts., and which contain, by my assays of fine gold, 68 lbs. 8 oz. 5 dwts., and of fine silver, 35 lbs. 9 oz. 10 dwts. The loss per ton in this whole treatment appears at 50.54. The consumption of Mercury amounts to 5,558 lbs. troy, or 4.17 parts—382 lbs. avoirdupois. Produce of fine gold per stamp head, 20 oz. 3 dwts. Fine gold recovered from each ton treated 15.42 dwts. Concentration, prior to amalgamation, as 180 to 100. For September have been stamped,

Rough ores 968 11 with an actual produce of 15 97 dwts. per ton.
Tails 100 10 10 0 ditto.

Total 1069 1 15 42 ditto.

The produce per head of mineral stamped is rather low, which is partly accounted for in consequence of the Mill Union (upper 18 head,) stamping so much tails; during which, of course, finer grades must be applied, and other minor interruptions in the other mills by changing grades which cannot always be particularly noted.

From Mr. Williamson, 13th. Oct.—The New Village continues to increase rapidly.

The Mine.—Our operations in this department are going on very satisfactorily, and every attention paid to the breaking and extracting of mineral. The quantity of ores conveyed to the mills from the 25th ult. to the 12th inclusive amount to 720 tons, of which, up to the date hereof, 700 tons may be computed as stamped. Mr. Degenhardt will, I expect, be able to extract 1200 tons this month. The new men apply themselves assiduously to their various duties, and the native miners also are steady and regular in their attendance. The Weather has during the last few days set in fine, but it does not appear to be settled. Stamp heads at work to the 12th inclusive, 46 heads at 37 blows per minute.

October 20th.—The Mine Department. The Tramroad in the old Cruzada level, from the junction of the N. Cruzada level, has been taken up this part of the level will in future be used only as a foot way.

Candado Adit Level.—In the end the lode has been cut, and according to the underlay there is reason to suppose that it is the main lode, although small and divided at present; when Mr. Degenhardt can spare time to make a survey he will be able to ascertain this point perfectly.

The Weather.—We had last night a fine fall of rain, previous to which there had been no rain for nearly a fortnight.

Stamp Heads at work from the 25th ult. to yesterday, 45 at 36 blows per minute; the quantity of mineral stamped about 900 tons to the 19th inclusive.

From the Minutes for October.—Weekly Peons. In the course of another week or two we shall be able to reduce the number of surface peons. The list of mountain peons has lately been rather high owing to the necessity of employing a large force to bring down timber for the new dressing floors, office, and projected shoot for conveying the mineral from the Sebastiana Extraction Level to the Cruzada floors.

Summary of Proceedings for September. Returns 68 lbs. 8 oz. 5 dwts fine gold, obtained from 9684 tons of ore, 100½ tons of tails, Stamped by 40½ heads, at the rate of 164 cwt. per diem, speed of stamps 40 blows per minute, fall of rain 10½ inches, ore raised 1100 tons, miners employed 22 English and 154 natives, ground expended 240 fathoms 22 feet.

Produce per ton of ore stamped 1542 dwts. of fine gold, produce per ton, stamp head 20 oz. 3 dwts., Concentration 1.80, loss per cwt. in the whole process 50.54.

October 19th.

Average number of heads at work date 45, speed of ditto 36 blows per minute, ore stamp ed to date 900 tons.

MOCANAS AND COCAES MINING COMPANY, Sept. 9, 1835.—It was stated in the postscript of the last report, that we had cut a vein at Halfield's shaft, from which we had taken some good stamps of gold; since then we have suspended the end, and have been rising on the vein towards the old workings of the Rasgao. We have taken stamps from it daily, the whole of which have been very favourable. We have about 14 fathoms to rise on this vein before we reach the old workings, which is necessary to be done as soon as possible, for ventilation, as it will be requisite to employ a great number of hands here in extending on the different veins, and if we should find this part of the old mine not yet fallen in, our object will be very soon effected, viz. a thoroughfare from Antonio Dias to Halfield's. We have made but very little progress in rising on this vein, in consequence of being obliged to alter the timber work in the level, and to make other preparations to commence the rise, which will account for the little produce from the vein to-day. Since the last report, I am happy to inform you that there is a great improvement at the Antonio Dias mine. Some samples were taken from the first vein on Saturday last, one of which contained 27 lbs. of jacotinga, and produced 3 oitavas, less 2 grains of gold; several others have been taken subsequently, and the results have also been very favourable, scarcely inferior to the first. This improvement, however, will not affect our clearing up to-day, as the shortness of the time would not allow us to get any stuff from the vein in time to be washed up, but I hope by the next post to be able to report an increase to our produce. I find from the very soft nature of the jacotinga risen from the lode at Halfield's, that it is useless to put it through the stamps, there being scarcely any stone in it to crush; we are therefore laying down canvas and skin launders close to the mouth of the shaft, to wash the stuff immediately on being extracted from the mine, and to prevent the escape of any small stones which might produce gold by being pulverized. A wire sieve of very fine mesh, made for the purpose, will be placed between the canvas and the skin launders, so as to receive the whole of the stuff, previous to its going over the skins; the fine stuff will of course be carried through with the water, and what remains will be put into the stamps. This I hope will assist us in our produce, as the stuff from the different mines is more than the stamps can get through with otherwise. The rise in the back of the shallow adit has been holed to the Bandeira mine, and I think leaves no doubt as to the identity of the last lode cut in the former place. We are now driving this level east towards the Cavaco on the course of the lode; the men are promised a reward extra for labour, and you will find by the annexed list that a great deal of work has been done during the last ten days. The lode in this level, as well as the Bandeira, is very kindly, and in both places the samples show gold. The lode in Macdonnell's 21 fathom level has still a very kindly appearance, but is yet very poor; the whole of the stamps taken from it, however, show gold. At Oxenford's 47 fathom level very little has been done, owing to our being obliged to put up a new and more powerful air machine, which is worked by the horse whim. This work is completed, and the men again employed in driving the levels. The lode here is large and promising, but very poor. At Waller's shaft we are cutting a plat at the shallow adit level, and making other preparations for sinking the shaft, which I hope will be completed in a few days. In the cross-cut the ground has been very favourable, but we are now in chertic slate, which I fear will be more troublesome to get through. In Irving's shaft we have made very good speed in sinking; the water, however, is increasing daily, and the ground

has become very troublesome, so much so, that we are obliged to closely timber every inch as we go. This shaft is now 21 fathoms deep, 10 fathoms only short of the level of the shallow adit, where, if the water should not prove too powerful, I hope to be able to reach, and to put a cross-cut to the heart of the Cavaco mine in time to meet the shallow adit there, when the stuff from the lode will be drawn up through this shaft, and carried to Waller's engine, to which we intend to fix a set of stamps if we find it necessary. The different surface works go on with great spirit. Macdonnell's engine is in course of erecting, but I cannot yet state the time it will occupy, but shall make the calculations in time for the next post.

The produce of gold from the stamps is.... 1 7 0 1
Do. from the veins 5 32
Do. from the samples 1 1 9
Total 2 0 6 42

The following list shows the work performed in the last ten days:—

Description of work.	fms.	ft.	in.	
Deep adit	Driven	0	5	0
Shallow adit east on the lode	do.	3	3	0
Rise in back of ditto	Risen	2	0	0
Bandeira Mine	Driven	2	1	0
Macdonnell's 21 fathom level	do.	6	4	0
Waller's cross-cut	do.	2	4	0
Halfield's 50 fathom level	do.	2	5	0
Do. rise on the vein	Risen	1	1	6
Antonio Dias, 1st vein	Sunk	2	0	6
Do. 3d vein	do.	2	0	0
Oxenford's 47 fathom level	Driven	1	3	6
Irving's shaft	Sunk	3	3	0

J. HITCHENS.

Sept. 28.—Since the last report we have holed the rise from Halfield's shaft to the old workings of the Rasgao, also the winze on the third vein, at Antonio Dias. We find the old mine in a very dilapidated state, so much so, that we consider the workings there will be of very little assistance to us in getting a communication between the two shafts Halfield and Morgan's; the impure air which has been so long confined in the old mine, has prevented us from doing but very little on the lode during the last 10 days. We are, however, driving the 50 fathom level at Halfield, as fast as the air will allow us across the veins. From Antonio Dias during the greater part of the last 10 days, the samples have been very poor, but on Saturday last we took some excellent ores from the first vein, the produce of one from about 30 lbs. jacotinga was 1½ oz. of gold—this is from the same vein; we have been working on at Halfield's, and which still produces good samples in the bottom of the 50 fathom level there, but we are prevented from working on it by the water. Having taken into consideration the long period which must elapse before Macdonnell's engine can be brought into operation, and after this, the time it will take to sink the shaft down, and to drive a cross-cut to the lode, we have come to a determination to put up a small temporary engine, similar to that at Waller's, it will be a 20 feet wheel, and built on a stamp axle, and fixed in the proper situation for a stamping mill; and when it can be superseded by the large engine, it will be immediately applied to that purpose; by this arrangement no labour whatever will be lost. We hope to be able to complete it in about a month, and we are of an opinion that a saving of seven months can be effected by these means, or in other words, that we shall cut the Rasgao veins at a depth of 12 fathoms perpendicular, or 31 fathoms on the course of the lode, under the deepest part of the old workings, seven months before we should if we were to wait for the completion of the large engine. This we consider is an object of great importance to the company, consequently there will be a temporary suspension of it, until the small one now in hand can be completed.

At Irving's the water has proved too plentiful for us to continue sinking the shaft, which is contrary to our expectations, as we were all of an opinion, that by cutting the lode in the shallow adit it would drain the water from the shaft, but we suppose the ground through which it has been sunk, (talcoose slate) has formed a dam between the shaft and the shallow adit, and prevented the water from escaping—this has been a disappointment to us, as we expected to have cut the Cavaco veins in a short time from this place. Although the shallow adit has not effected a drainage to any great extent around it, we think it very probable that the lode all above that level in the Cavaco has been drained by it, and on this supposition we have commenced sinking a shaft, or winze, on the course of the lode in the great excavations; this shaft according to information, will intersect the veins at a depth of about 30 fathoms, and we hope, from the favourable state of the ground here, if the water will allow us to proceed in sinking, to be able to reach this depth in about 2 months, but should it here also prove too plentiful for us, we have no alternative left, but to wait for the Bandeira mine, which in that case will be the first to reach the veins.

In the lode at the shallow adit there is no alteration—the ground is still hard, and our progress slow. In the Bandeira, however, which is about 10 fathoms before the shallow adit, the lode is promising, and the ground is very favourable for breaking, but all the samples taken from it have hitherto been very poor. In Waller's cross cut the ground is without any material alteration. We have not yet done much towards sinking the shaft, on account of its being necessary for the men's safety, to put in some extra timber work. In the lode at Oxenford's 47 fathom levels there is no alteration, all the samples taken from it have proved poor. In Macdonnell's 21 fathom level is very large and promising, but we are sorry to say there is no improvement in the samples from it.

J. HITCHENS. S. HITCHENS.
F. HALFIELD. THOS. TRELOAR.
JNO. GILBERT.

ST. JOHN DEL REY MINE.—Mining Report for September, 1835. We have this month, like the preceding one, been preparing ourselves for the rains. Several Works yet remain to be finished. Shed for the whim. Stable for the whim horses, and sheds for Crickitt's and Vinagrad shafts. On the 14th, we divided our mining force into two corps, since which our mining operations have gone on with more spirit and regularity.

Mine. Bahu Shaft. A piece of timber 25 feet 10 inches long by one foot through, alluded to in my last, was placed across the shaft on the 19th for a penthouse, and for hanging the lower lift of pumps, the former work has not been completed, as we intended, for want of timber. Six men day and night the former part of the month, and four the latter, stationed there.

Bahu End West. Has been continued regularly during the month, no alteration in the lode. Four men day and night.

Bahu Stopes. Twelve men at the commencement of the month, and since the division of our force eight by day and six by night.

East and West Pillars. Since the 14th, we placed all the hands we could advantageously (eight men day and night) on the east pillar, and on the west, two men day and night.

Crickitt's Shaft. At the early part of the month three English and four labourers were employed blasting down a piece of overhanging rock, which was considered unsafe to work under; on the 5th, we commenced uncovering the shaft, this occupied us till the 11th, in consequence of the large pieces of rock and quantity of earth which had fallen on it. The shaft has been raised three sets of timber thirteen feet, and a tackle fixed. Five days were occupied clearing to the bottom of the shaft, and on the 25th we began sinking to the level of the Bahu End West. We have yet about eight or ten days work to finish filling up the old bottoms, this job we intend for the new negroes that are daily expected.

Vinagrad Shaft. In this work no discovery of any importance has been made. The new bob was completed on the 10th, and the engine went to work the same day, from which time, till the 22d, two English miners and five labourers were employed clearing the earth which ran while the end was idle, and also that which had been previously left there. From the 22d to the 28th we drove 22 feet 5 inches (10 feet 5 in. N. 22 deg. E. and 12 feet W. 35 deg. N.) our object being to get into firmer ground in order to sound the shaft for the purpose of raising to the old bottoms on a lode we had cut at the bottom of the shaft, and which we imagined was the one we were in search of; this we found impracticable (from the hard stone or killas taking a different direction to that we expected) without making a more sudden rise than we intended, and thus losing several feet in our level, which it was desirable to avoid, from the uncertainty of the depth of the old workings, of which we cannot obtain any distinct information, and also being obliged to blast one side of the end, which would probably injure our shaft. Under these circumstances, we decided on the 29th on opening on the lode from the N. W. corner of the shaft; this, although it was the nearest in a direct line to the point we wished to arrive at, we had all along endeavoured to avoid, from the crushed and wet state of the ground; however by care we suc-

SPAIN.

From the pen of one of our Correspondents we have been supplied with the following "Remarks on the present state of Spain," and feel much pleasure in assigning to them a portion of our columns, convinced that in the present state of the Peninsula every thing connected with its history must be highly interesting to many of our readers, and we shall furnish in continuation, a series of valuable information on this important portion of the European States, respecting the real situation of which so little appears generally known.

REMARKS ON THE PRESENT STATE OF SPAIN.

A very large portion of the richest lands in Spain are at the present moment lying entirely waste, without even an owner, and the State is thus deprived of an immense produce which individual industry might otherwise extract from it. This evil has arisen from the agrarian laws enacted shortly after the expulsion of the Moors, which declared that all waste lands should be exclusively appropriated for feeding the flocks of the "Mesta," or incorporated proprietors of migratory sheep. The members composing this body have for the last two centuries been sufficiently powerful to maintain and extend their peculiar privileges. They have at present the right of preventing lands, once appropriated to pasture, from ever being cultivated, as well as that of preserving and extending the roads for the passage of their flocks, which are never allowed to be interrupted; they have also the privilege of rating the price of the grass consumed by their flocks, and of successively participating in all public pastures; in short, the farmer is interdicted from enclosing his lands, or preventing the free passage of their flocks through his fields and fallows, which are in consequence regularly traversed every spring and autumn by the migrating sheep in their journeys to and from the northern and southern provinces. Another large portion of the land in Spain is absorbed in municipal property, consisting of estates granted for the support of various undertakings, such as making roads, building bridges, draining marshes, cutting canals for irrigation, &c., but which for the most part remains uncultivated. Many of the common lands have also been granted to corporate bodies for encouraging the rearing of oxen and horses; although, if the farmers were allowed the privilege of enclosing their own fields, they would possess ample facilities for feeding cattle; indeed, most of the fine horses in Andalusia are bred in private pastures. If these waste lands, which compose the aggregate a very rich and extensive territory in Spain, were disposed of by the state in limited lots, or let out on leases, they would soon become populous, and put into a productive state of culture, affording better pasture for the numerous flocks and herds than they do in their present waste state.

Commissioners ought to be appointed to draw up a report of the actual quantity and condition of all the waste lands in each province, and after arranging a proper division of the whole into separate districts, the government might proceed to the disposal of the same. It would, however, be necessary to pass a law for preventing such lands being left in perpetual entail, as well as for prohibiting, in future, the granting of lands and estates to churches, monasteries, or other corporate bodies. All municipal lands ought also to be sold outright, or let on long leases, the funds so produced being placed out to interest under trust, and employed upon works of acknowledged utility, for the benefit of the various communities for which these lands were originally granted. No evil could result from the sale or alienation of such lands, but, on the contrary, besides making a better provision for the purposes originally intended, they would afford the means of support to numerous individuals. In districts where population is scanty, and in order to encourage settlements, lands might be let out to industrious settlers, in small lots, sufficient to maintain their families from its produce, charging only a moderate interest on the expenses incurred in building and stocking the farms, and allowing the parties the right of purchasing the same at a fair valuation, to be estimated according to the qualities of the soil, and the advantages of the district. In the province of Andalusia there is an immense portion of rich lands lying waste, and which would readily find purchasers, provided payment were allowed to be made by instalments, as owing to the want of capital it might be difficult to sell for ready money only. If the privileges of the "Mesta" were abolished, and permission granted for enclosing estates, it would afford encouragement for a number of small proprietors to commence farming, whereby a greater number of people might be employed in agriculture, and a greater produce derived from the soil, thus tending to diffuse wealth and comfort throughout the country. The enclosure of lands would also be the means of dispersing population over the country, by the establishment of small farms, and landed proprietors might then be induced to reside on their own estates. It has generally been found that the farms conducted upon the extensive scale as practised in Andalusia, independently of the large capitals they require, are in general badly, or not sufficiently cultivated, both from the scarcity of labourers, as well as from the extent of the farms, which will not admit of being attended to with the same care and economy as on smaller estates, and are consequently less productive; it follows that when the farmer holds more land than he possesses the means of cultivating, a great portion of it must remain neglected every year. All venustious municipal laws enacted under the pretence of protecting agriculture, such as those preventing certain lands being turned from grass into arable, and the reverse, restrictions on planting, and a prohibition to transplant vines and fruit trees, ought to be abolished, as well as the laws regulating the price of rents, which should be left to the free and unbiased settlement between landlord and tenant. Another grievance to the small farmer and retail dealers are the fiscal laws regulating the sale of meat, eggs, vegetables, fruit, &c. which prohibit the country people from selling their commodities without the towns, obliging them to bring their articles for sale at certain hours, giving corporations, innkeepers, and others the privilege of being first served; regulations intended to prevent monopolies, but which in fact only tend to diminish supplies, and increase the prices of provisions. The taxes, also, with which oil and wine are burdened, greatly discourage their growth. These fiscal laws impede the prosperity of agriculture from the restraints they impose on the freedom of traffic by vexatious formalities, legal suits, and the detention of property to which the persons are liable in cases of neglect. The restrictions on the corn trade ought also to be done away with, and a free trade allowed with the interior. Merchants might then be induced to venture their capital in bringing wheat from the provinces where there is a superabundance to those in which a sufficiency is not grown, whereas by the restrictions now imposed on the sale of grain, this trade is almost entirely confined to the carriers, who, possessing only limited means of conveyance, with little capital, have neither the facilities nor the power of supplying the demands for distant parts. A free internal trade for all the productions of the soil appears indispensably necessary for promoting agricultural prosperity.

The taxes at present imposed upon agriculture consist of, as follows:—
Provincial or pasturage rents, varying from 2 to 7½ per cent.
Civil fruits (a tax on the rental of lands) 5 to 6 per cent.
Alcavala, or gate duty, on the sale of poultry, cattle, meat, fruit, vegetables, &c. equal to 4 per cent.; tithes to the clergy.

Duty of millions, on oil and wine, about 15 per cent.
The Alcavala tax is redeemed in the provinces of Castile, Arragon, Biscaia, and Navarre.

The clergy and monastic establishments are exempted from the provincial rents, which are allowed them back under the plea of repairs.

The laws of majorate and mortmain, which favour the entailing of lands in perpetual succession upon certain families, corporations, churches, monasteries, &c. granting indefinite permission for increasing such entails, at the same time prohibiting their alienation, exclude the greater part of the community from the slightest chance of ever becoming possessed of landed property, which, from the small quantity for sale, is always exorbitantly dear, and, of course, at the disposal only of the most wealthy, who already hold more land than they can manage to cultivate. If the laws restricting the alienation of entailed property were, therefore, repealed, and these estates, allowed to be let out on perpetual, or long leases, the land would then stand a chance of becoming cultivated, instead of being left in its waste and unproductive state. Under the present laws and ordinances of woods and forests, all large timber fit for naval purposes is marked, and returns must be sent in regularly as to the quantity, and the state of its growth; permission is also required for felling it, although it must be cut down when wanted, and sold to the government at prescribed prices, so that little or no encouragement is afforded for individuals to attend to the growth of timber; and the consequences are, that both wood for the purposes of building, as well as for fuel, is daily becoming more scarce and dear. If proprietors, however, were allowed to enclose their forest lands, and had the right of disposing of their timber when and how they pleased, plantation would be more attended to, and the wants of the public better and cheaper supplied, planting of trees would be another benefit resulting from enclosure, the young plantations being almost invariably destroyed by the cattle for want of protection.

An increase in the number of farms would finally facilitate the operations of irrigation, so necessary and useful in most parts of Spain, as it would tend to divide the expenses and labour, which now fall too heavily on most farmers; constant attention being required in clearing and keeping the trenches in order, opening and shutting the sluices, distributing, directing, and confining the waters, all which occupy much time and expense. In order, therefore, to restore agriculture in Spain to a state of prosperity, it appears requisite—

1. That the privileges of the "Mesta" be abolished, and that every individual be guaranteed by law in the exclusive possession of his property.
2. That proprietors be allowed to inclose their estates, and be protected against all aggressions.
3. That measures be adopted for disposing of the waste lands, and bringing the same into cultivation.
4. That all municipal laws regulating or restricting the sale of agricultural produce, or the manner of cultivating the soil be abolished; proprietors being left in the free management of their own estates.
5. That all fiscal duties and imposts on the common necessities of life be remitted.
6. That the trade in corn with all parts of the interior of Spain be declared free.
7. That the trustees of lands and estates belonging to the church, monasteries, and corporate bodies, be empowered either to sell the same, or let them out for cultivation.
8. That it shall not be lawful in future to bequeath any lands or estates to churches, monasteries, or other corporate bodies.
9. That the laws allowing of perpetual entail be established.
10. That the proprietors of all entailed estates be allowed to let out the same on long leases.
11. That the laws respecting woods and forests be repealed, and the proprietors allowed the free disposal of their timber.

ASCENT OF MONT BLANC.

Mont Blanc, as is generally known, is the highest peak of the Alps, and the loftiest grand in Europe, being 15,666 feet above the level of the sea. It is situated in the duchy of Savoy, now a part of the Kingdom of Sardinia, in a range of mountains between Geneva and Turin, and rises immediately above the narrow valley of Chamounix, from which place alone, is the ascent to its summit ever made. Though Chimborazo is between 6,000 and 7,000 feet higher than Mont Blanc, it only rises 11,600 feet above the neighbouring valley of Quito: in this respect Mont Blanc may be considered as a more remarkable mountain, as it rises 12,300 feet above the valley of Chamounix, the whole of which vast height can be scanned at once from the opposite eminences. For 7,000 feet below the top Mont Blanc is perpetually covered with ice and snow. The distance, from the bottom to the top, by the shortest route which can be pursued, is considered by the guides as 18 leagues, or 54 miles.

Speaking with precision, Mont Blanc is only the most eminent of a range of peaks springing from a vast extent of eminent ground on the south side of the valley of Chamounix. When the traveller enters the valley on the opposite side at an eminence called the Col de Balme, this range, coming at once into view, oppresses his imagination with a vastness unexpected even in that land of Alpine grandeur. While the vale below smiles with the most luxuriant vegetation, the sides of the hills are clothed for a considerable way up, with dark and dense forests, and higher still, with the accumulated hoariness of centuries.

To attain the summit of a mountain so lofty as Mont Blanc, was long an object of ambition, both to the native peasantry and to men of science, before any one was so fortunate as to effect it. It was first tried in 1762, again in 1775, and on four other occasions down to 1786; without success. At length, in the year last mentioned (August 8), this difficult enterprise was accomplished by Dr. Paedard, a native of Chamounix, in company with a guide named Balma. The mountain was ascended in the succeeding year by M. de Saussure, who gave to the learned world a very minute account of all the phenomena which he observed in the course of the expedition. Another attempt in the same year, one in 1791, a third in 1802, were the only successful attempts down to 1812, when a Hamburg gentleman named Rodatz gained the summit. From that time till 1827, seven successful attempts were made, besides one of the contrary description in 1820, which was outshone by the descent of an avalanche, and the loss of three of the guides. In August, 1827, the ascent was performed by Mr. John Auldjo, of Trinity College, Cambridge, who published an account of it, illustrated by maps and drawings. In 1830, Captain Wilbraham made a successful ascent, and in 1834 another was performed by Dr. Martin Barry, who likewise gave an account of his adventures and observations to the world. This last ascent was performed on the 17th of September, a week later in the year than any preceding ascent, and considered on that account as more than usually dangerous. A few weeks still later, a French gentleman, having been informed that so countryman of his had ever made the ascent, while it had been made by eleven Englishmen, besides several natives of other countries, determined instantly to wipe away this imaginary reproach upon the fair fame of his country, and the consequence was—success, at the expense of his feet, which were destroyed by the cold. We are not aware that any attempt has been made, in the season just past, to perform this dangerous enterprise.—*Chambers's Edinburgh Journal.*

FOSSIL WAX.

DR. MEYER has forwarded a specimen of fossil wax to the French Academy of Sciences, with all the details concerning it which he had been able to procure. It was found in Moldavia, at the foot of the Carpathian Mountains, covered with a stratum of clay slate, mixed with bitumen. M. Udreisky, a German, had bored a mine there, and in it found pieces weighing from 80 to 100 lbs. The texture varies considerably; sometimes its fracture is fibrous, at others leafy; occasionally it is rippled: it is very pure and transparent at the edges, melts at a temperature of 40 deg., and yields a bituminous odour, by no means disagreeable. When washed in several waters, this substance assumes a deep yellow tint, and in this state is employed in the manufacture of candles. Not far from the place where it was found, are several layers of brown amber, which leads M. Meyer to believe that it may be yellow amber disturbed while joining. Cold alcohol has no action upon it; when boiling, it dissolves a small quantity, which in cooling precipitates itself in white flakes. The residuum acquires a deeper colour and more tenacity. Ether, at an ordinary temperature, dissolves that part which gives the yellow colour, leaving an almost colourless residuum. Alcohol and ether mixed, precipitate the dissolved portion, and this precipitate, exposed to the fire, melts at a low temperature, and stains paper in the manner of oil. It is perfectly dissolved in oil of turpentine, and the solution coagulates in cooling. The alkalis do not turn it into soap. Sulphuric acid carbonizes it, even at a temperature which causes it to melt. It does not emit a flame when exposed to a candle. M. Paravey has been seeking among Chinese authors for an account of this fossil wax. He states, that in the book of Pen Tiao, the *hou-pe* or *hou-pe* is said to be formed as follows: the resin or grease of the wild pine or larch, left in the earth a thousand years, gives the fouling, a sort of excrement from the roots of these pines or larches which have been cut down even with the soil, and the presence of which is discovered by a luminous vapour rising over the spot. It is a rare and expensive substance, employed in medicine, and when combined with the still more precious roots of the quinseng, and left a thousand years, or a very long time in the earth, gives the *hou-pe*, and if, after becoming *hou-pe*, it is again left for a thousand years, it gives the black stone *to*, or *to-pe* (evidently jet). M. Brongniart says, in his "Mineralogy," "that with the Prussian amber are often found the fruits of the *Pinus abies*; and the tree called in Chinese *Song*, from which the *hou-pe* is said to come, is the *Pinus abies*."—*Athenaeum.*

On Thursday, the 31st ult., a young man, named Richard Temby, of Camborne, was working at the valley district in Dolcoath mine, on what is commonly called a "swing stage," that is a stage let down into a gunnies or workings, where no timber is long enough to reach from side to side. The stage consists of a platform let down by ropes or chains from a narrower gunnies, where it can be secured against one of the sides where the miners intend working. This unfortunate young man fell over a stage of this sort to a perpendicular depth of 13 fathoms, on a heap of immense rocks which they had been blasting down from the side, and was taken up all but dead, in fact, he died in the arms of his comrade while being removed for the purpose of being taken to the surface. A coroner's inquest was held on the following day on his remains and a verdict of accidental death returned.

MISCELLANEA.

Melancholy and Fatal Accident.—On the morning of Tuesday night, as the colliers belonging to the Braze, or Llanelli Colliery, were descending the pit to go to their work, five of them innocently went into the basket, in order to save themselves the trouble of going down over the ladders; when, owing to a deficiency of steam to manage the engine, after they had gone down a little way, the engine stopped and began to work the contrary way, which brought the basket in which they were in violent contact with the sheave above the pit. The rope in consequence gave way, and shocking to relate the whole of the men were precipitated to the bottom, a depth of nearly 180 yards! They were of course crushed to atoms, and could scarcely be recognized by their respective relations. Their shattered remains were collected as well as circumstances would admit, and wrapped up in canvass; but when they came up they presented a truly heart-rending spectacle. A lad who was seated on the spreader over them miraculously escaped, by clinging to one of the conducting chains. It is most astonishing how he had the presence of mind to hold on, for he went down several fathoms, and stopped himself entirely by the strength of his arms, on a slippery chain, until he was rescued from his perilous situation. No blame can justly be attributed to any person but to the temerity of the men, for the engineer, before they descended, told them that there was not a sufficient quantity of steam to regulate the engine. Mr. Morgans, the manager, had also repeatedly cautioned them against going down in such a dangerous way; and even the banker, the same morning, remonstrated strongly with them; but all to no purpose. An inquest was held on their remains the next day, before W. Bonville, Esq. Coroner, and a verdict of accidental death returned.—*Welshman.*

Scientific Travels.—It will be recollected, that MM. Becquerel and Breschet were furnished by the French Academy of Sciences with the means of pursuing their experiments on animal heat, at great elevations above the sea. They were also recommended by the French government to the various representatives of their own country, in the stations which they visited. The travel terminated: M. Becquerel has announced to the Academy that he shall shortly lay before it some important results. These gentlemen have made observations on the intensity of terrestrial magnetic force, by means of a new apparatus at Vevey, Bex, Martigny, Liddes, Grand St. Bernard, Sion, the baths of Loueels, Briggs, the Simplon, Raverio, Milan, Pavia, and Venice. The temperature of the human body has been observed on high mountains, in valleys, plains, &c., at the usual atmospheric temperature, and in baths, where the thermometer fell to 45° centigrade. The temperature of the Lake of Geneva has been measured at a depth of more than 300 feet, which experiment has discovered a new and unexpected property in electrical currents. In the Valais, the travellers watched the symptoms of the goitres, and at Venice observed the electricity of the torpedo. They have also collected many details relative to the decomposition of rocks, which they think will throw light upon geology.—*Athenaeum.*

"Adieu to a Sea Coal Fire."—The time, we are inclined to think, is not far distant, when the heating of all large towns will be reduced to the same degree of simplicity as now exists in the mode of lighting them, and of supplying them with water. In another half century, the only coal fires in London will probably be those of the gas works, of the steam engines, and of the manufactories. There is nothing to hinder all private houses from being heated, as well as lighted, by gas; and from having all the cooking of every description, boiling water for washing, heating baths, smoothing irons, &c. performed by that fluid.—*Architectural Magazine.* [One correspondent of the work, says in ten years an end will be put to the plan of heating rooms by water. Another predicts that a hot water apparatus, such is its comfort and so moderate its expense, will soon be considered indispensable in dwellings.]

The immense wealth of Mr. Bowes.—The immense wealth of Mr. Bowes, father of the late Countess of Strathmore, arose in great part from his mines in Durham. He paid in tithe to the rector of one parish an equitable modus of £700 per annum. The living, exclusive of this, was worth only £100. The rector became covetous of a larger modus, and demanded £1,000 per annum. Mr. Bowes desired a few days to consider the matter. In the interim he sent for his head miner, and gave him orders to shut up the shaft then in use, and to open one in the next parish, where was a very poor living. He then sent word to the covetous man that the shaft was shut up, and should never be opened while the living was held by him.

Chemical Problem.—M. Biot has proposed in one of the sittings of the French Academy of Sciences, the following question to chemists. When crystals of pure tartaric acid are dissolved in different proportions of water, at a temperature of from twenty-two to twenty-six degrees centigrade, are there, or are there not, in this actual state of aqueous solution, molecular properties, depending on the proportions which constitute it? and if there are such, can the physical law be pointed out which will define or express them, for each given proportion of the two bodies? If this question should attract the attention, and lead to the researches of chemists, M. Biot has no doubt that the results would produce some very remarkable consequences. While waiting for the labours of others, he has lodged a sealed solution of this chemical problem in the hands of the French Academy of Sciences, obtained by himself, and which will be opened at the first sitting in December.

Malachite.—The Baron de Humboldt has informed the French Academy of Sciences, that a large mass of malachite has been discovered in the copper mines of the MM. Demidoff, situated in the Uralian mountains. Two thousand five hundred and sixty pounds have been already taken from this deposit, and since its discovery, another has been found of enormous size, without a crack. This circumstance is rendered more important, by the entire failure of the vein of Malachite in the mines of Goumetchskoi.

Fossil Remains.—In a letter written to M. Arago, and communicated by him to the French Academy of Sciences, a M. Bernard announces that some bones have been found in the cave of Gigny, between Bourg and Louis le Saunier, which were supposed to be fossil human remains. These remains have been sent to Paris, and the head has been examined by MM. Cordier, Flourens, and Dumeril, but these naturalists have not been able to find anything which entitles it to be called a fossil. By the side of these bones were found embers and charcoal, and no antediluvian remains exist in the neighbourhood. It is probable that the cavern had been used as a catacomb.

Adventures of a Diamond.—A letter from Hamburg states, the Grand Veneur of the Emperor of Russia has bought the famous Sancy diamond, for the sum of 500,000 roubles, and that the merchant, Jean Friedlieu, has been the Duchess of —'s agent in this affair. The diamond originally came from India, and has remained in Europe for the last four centuries. The Duke of Burgundy, Charles the Bold, was its first owner, and he wore it on his helmet at the battle of Nancy, in which he lost his life. A Swiss soldier found it, and sold it to a priest for a florin. In 1489 it came into the possession of the King of Portugal, who, being in want of money, sold it to a French gentleman for 100,000 francs, Nicholas Harley Sancy, who gave it his name, had it afterwards by succession. At the time of his embassy at Soleure, Henry the Third enjoined him to send him the diamond in order to pledge it; the servant that had been entrusted with it having been attacked by robbers, swallowed it, and was murdered. Sancy ordered the corpse to be opened, and the diamond was found in the stomach. James the Second of England possessed this diamond in 1688, when he came to France; it came afterwards into the possession of Louis XIV., and Louis XV. wore it in his crown at his coronation. The diamond has the shape of a pear; it is of the most beautiful water, and weighs 53½ carats.

New Discovery in Chemistry.—We have to notice the discovery of another of those active vegetable principles which every fresh analysis of plants brings to light. This substance, which has been termed diastase by its discoverers, MM. Payen and Persoz, occurs in barley which has just begun to vegetate. It has little or no action upon any organic matter, excepting starch, upon which it is so considerable as to render 2,000 times its weight of the latter soluble in four times as much warm water. If the proportion of the diastase be increased to about 1-200th of the weight of the starch, and the whole heated to a temperature less than that of boiling, it will be found that the starch has been wholly converted into a mixture of sugar, with a gum resembling gum arabic. The latter is now employed, in the great hospitals of Paris, as a substitute for gum arabic. The fact has been long known, though not previously accounted for, that beer, equally strong, may be brewed from a mixture of malt and barley, as from malt alone; and distillers have availed themselves of this circumstance. The starch of the barley is, by the action of the diastase of the malt, converted into gum and sugar, and the latter, when fermented, furnishes the alcohol or spirit. In organic analysis, diastase, from the extraordinary power which it possesses of rendering soluble so vast a proportion of starch, will render valuable service, as it will enable the chemist to separate the smallest portions from foreign substances.

The Analyst

FROM THE LONDON GAZETTE.

Tuesday, Jan. 5.

PARTNERSHIPS DISSOLVED.

J. and R. Oliphant, Camp-street, army cap makers.—J. Corbett and R. C. Inett, Nottingham, hair dressers.—Maitland and Steel, Liverpool, merchants.—Clementson and Fortune, Liverpool, attorneys.—W. Tooke and C. Parker, Bedford-row, attorneys at law.—T. Blackburne and G. Dickson, Liverpool, commission merchants.—T. Chaffield and G. Grantham, jun., Lewes, Sussex, timber merchants.—J. and C. Cox, Nottingham, lace manufacturers.—Stowell, Wade, and Co., Bradford, Yorkshire, worsted spinners.—Harris and Poon, Bazaar-street, Worcester, mercers.—L. Knowles and Sons, General, York, cloth merchants, as far as regards R. Winstanley and J. R. Jallott, Manchester, agents.—J. and G. Mace, Wolverhampton, Staffordshire, locksmiths.—J. M. McDonald and A. M. Ingham, Everton-street, Russell-square, tailors.—T. R. Johnson and J. S. Wooler, New-castle-upon-Tyne, soap boilers.—W. and J. Pettifor, Leicester and Nottingham, carriers.—M. Shaw and Son, Workop, Nottinghamshire, whitesmiths.—G. Burbridge and T. Bishop, Watling-street, fancy stationers.—Shan, Driver, and Co., Leeds, merchants.—J. Scott and W. Parker, Liverpool, corn merchants.—T. Walton and J. Stock, Preston, Lancashire, corn dealers.—J. and S. Fox, Sheffield, merchants.—Jones and Maples, Liverpool, wine dealers.—W. Richardson and R. Sargent, Barrow, Lancashire, blacksmiths.—E. Bird and W. Ackland, Plymouth, rag merchants.—Richards and Schmiedes, Liverpool, ale brewers.—J. Harrison, T. S. and A. Stock, and J. Lynch, Ashton, Lancashire, coal proprietors; as far as regards S. Stock—Wilby and Home, Berwick-upon-Tweed, attorneys at law.—H. and J. Leach, Wisbech, Cambridgeshire, booksellers.—Johnson and Sons, Langley-place, Commercial-road, leather sellers; as far as regards R. H. Johnson.—J. Price and Co., Liverpool, rope makers; as far as regards A. Smith.—J. Burrows and H. Roberts, Manchester, common brewers.—Johnson and Palmer, Birch-street, wholesale ironmongers.—J. Tildesley, sen., and T. Sturdliff, Birmingham, carriers.—J. Beck and W. Prime, Coventry, bankers.—Holt and Tolly, Liverpool, commission agents.—S. and G. Castleden, St. Dunstan's, near Canterbury, corn factors.—R. Cockson and J. Ottley, Manchester, porter dealers.—Church and Wildish, Mark-lane, wine merchants.—Higgins and Day, Liverpool, commission merchants.—W. Allen and J. H. Townshend, Huggin-lane, Wood-street, warehousemen.—G. Norton and Co., Clayton West and High Bridge-mills, Yorkshire, fancy cloth manufacturers.—H. and W. Pannell, High-street, Poplar, grocers.—J. Finlay and W. Neilson, Glasgow, bankers.

INSOLVENT.

Jan. 5.—George Thomas Clough, George-street, Great Surrey-street, Blackfriars, baker.

BANKRUPTS.

Henry Nicholls, Quadrant, Regent-street, glover, to surrender Jan. 12, at half-past 11 o'clock, Feb. 16, at 12, at the Bankruptcy Court, Basinghall-street. Solicitor, Mr. Hodgson, Cecil-street, Strand, official assignee, Mr. Abbott.
Otto Jacob George Hawkins, Upper Belgrave-street, Hancote-square, boarding housekeeper, Jan. 5, at 1, Feb. 16, at 11, at the Bankruptcy Court. Solicitor, Mr. Hurley, Gray's Inn-square, official assignee, Mr. Edwards, Pancras-lane.
Thomas Joseph Titterton, Gray's Inn-lane, coach maker, Jan. 15, at 1, Feb. 16, at 11, at the Bankruptcy Court. Solicitors, Messrs. Fisher and De Jersey, Aldersgate-street; official assignee, Mr. Goldsmith, Ironmonger-lane.
William Orendale, Scorton, Yorkshire, cattle jobber, Jan. 27, Feb. 16, at 11, at the house of Mr. Fryer, Catterick-bridge, Yorkshire. Solicitors, Messrs. Tilson, Skelton, and Tilson, Colneham-street.
Philip Perry, Llangrove, Breconshire, victualler, Jan. 20, Feb. 16, at 12, at the Castle hotel, Brecon. Solicitor, Mr. Price, Aberystwyth.
George Dixie Fisher, Waterhouse-cottage, Wiltshire, maltster, Jan. 15, Feb. 16, at 1, at the White Lion, Bath. Solicitors, Messrs. Holme, Frampton, and Loftus, New Inn.
John Ashwin Smith, John and Abraham Lees, Elston, Staffordshire, grocers, Jan. 16, Feb. 16, at 11, at the Lion hotel, Wolverhampton. Solicitors, Messrs. Clarke and Medcalf, Lincoln's Inn-fields.
George King, Pottin, Bedfordshire, money scrivener, Jan. 14, Feb. 16, at 11, at the King's Arms Inn, Bedford. Solicitor, Mr. Lloyd, Staple Inn.

DIVIDENDS.

Jan. 29, E. Perkins, Northampton, victualler.—Jan. 26, J. and W. Jackson, Strand, stationers.—Jan. 26, M. Arnold, Tavistock-street, Covent-garden, bookbinder.—Jan. 26, J. Porrett, Bradford, Yorkshire, innkeeper.—Jan. 27, J. Deacon, Reeth, Yorkshire, corn factor.—Feb. 3, J. M. Bird, Liverpool, chemist.—Jan. 26, J. Austin, Manchester, brick maker.—Feb. 17, J. Cooper, Liverpool, joiner.—Feb. 9, R. S. Clare, Harrington, near Liverpool, tar distiller.—Jan. 27, C. Fletcher and A. Woodhead, Salford, Lancashire, common brewers.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before Jan. 26.

R. C. Heigham, Lakenham, Norwich, beer brewer.—A. Leigh, Manchester, builder.—G. Baker, Birmingham, auctioneer.—A. Moore, Well's-row, Islington, builder.—W. Marshall, Colchester-street, Whitechapel, steam engine boiler maker.—S. Stocker, Baptist-mills, Gloucester, victualler.—S. Lorymer, Bristol, brewer.—G. I. Hutchinson, Essex-street, Strand, long house keeper.—R. Farrar, Guildford-street, St. Pancras, apothecary.—M. A. Phillips, Dorset-square, school mistress.—W. Hanway, Liverpool, merchant.—G. Phibbs, Blenheim-street, Bond-street, wine merchant.

PARTNERSHIPS DISSOLVED.

W. H. Robinson and C. Robinson, London, merchants.—J. Bubb and B. Bubb, Cheltenham, attorneys.—J. Warcup, J. B. Warcup, and W. Warcup, Deptford, Kent, so far as regards J. Warcup.—J. Carpenter and J. Blackley, Leeds, Yorkshire, pawnbrokers.—C. Turner and C. Turner, jun., Liverpool, ship-brokers.—W. Churchill and E. Franklin, Oakley-street, Lambeth, harness makers.—J. J. Simons and B. H. Simons, Clerkenwell-green, coffin makers.—R. J. Nevill and L. B. Simons, G. Jubber and H. Jubber, Oxford, confectioners.—T. Wade and J. Vale, Peter's-place, Henman's-row, goldsmiths.—S. Thurston and G. Dyer, Southampton-street, Blomfield-square, architects.—E. Shelton and G. Shelton, Birmingham, timber merchants.—J. Neyler and E. Danglefield, Cheltenham, Gloucestershire, coach proprietors.—W. McKie and P. Gladhill, Newcastle-upon-Tyne, drapers.—J. Gifford, Claremont-square, Pentonville, and J. Fowler, High-street, Whitechapel, butter factors.—G. Hall and C. Johnson, Bowl-yard, St. Giles's, porter brewers.—W. Burton and H. Jeffery, Broad-street, Ratcliff, shipping-brokers.—H. J. Merch and F. T. Schmidt, Hamburg, Germany, and G. F. Thode, Manchester, merchants.—W. Robinson, R. Rathbone, J. Powell, and E. Dearman, Liverpool, merchants.—H. Harnsworth and J. Pettifor, Bow, Middlesex, bleachers.—W. Gower and W. Day, Maidstone, Kent, corn factors.—J. P. Wright and K. Wilson, Sheffield, Yorkshire, surgeons.—P. O. Adams and B. E. Bennett, Market Harborough, Leicestershire, attorneys.—S. Addington and W. Cobbett, St. Martin's-lane, woollen drapers.—K. Friggle and J. Cuthbert, Liverpool, seedsmen.—S. Oughton, sen., J. Ashworth, and S. H. Oughton, Newton-heath and Manchester, silk manufacturers.—J. Robinson and E. Robinson, Skipton, Yorkshire, iron-smiths.—W. S. Bartlett and J. W. Welch, Audley, Friars, spirit-dealers.—W. Scaat and J. Elgar, Park-lane and Moabit-builders.—C. Whitley and T. M. Whitley, Halifax, Yorkshire, hatters.—J. E. Stanley, E. Cryer, and J. Garside, Ashton-under-Lyne, Lancashire, machine makers.—T. Parkinson and R. H. Parkinson, Oxford-street, oil-merchants.—E. Soller and W. Sage, Chester, common brewers.

BANKRUPTS.

Peter Walker, Quikset-row, New-road, builder, to surrender January 18, at two, and February 19, at twelve, at the Court of Bankruptcy. Attorney, Mr. T. H. Peile, Old Broad-street. Official assignee, Mr. Graham, Cophall-buildings.
William Buck, Hammersmith, victualler, January 18, at one, and February 19, at twelve, at the Court of Bankruptcy. Attorneys, Messrs. Langham, Bartlett's-buildings, Holborn; official assignee, Mr. Penne.
John Moser, Oxford-street, cabinet-maker, January 18, at two, and February 19, at eleven, at the Court of Bankruptcy. Attorneys, Messrs. Watson and Sons, Bowrie-street, official assignee, Mr. Johnson, Basinghall-street.
Andrew Ashworth, Haslingden, Lancashire, woollen-manufacturer, February 4, at eleven, at the Commercial Inn, Bolton. Attorneys, Messrs. Milne, Perry, and Co., Inner Temple, London; Mr. Mitchell, Haslingden.

DIVIDENDS.

February 14, J. Rhodes, Longwood, Yorkshire, clothier, at ten, at the George Inn, Huddersfield.—Feb. 14, Isaac Pennington, Worcester, brush-maker and tobacco pipe-manufacturer, at half-past eleven, at the Court of Bankruptcy.—Jan. 20, J. Knapley, Blackman-street, Borough, at eleven, at the Court of Bankruptcy.—Feb. 25, W. Cole and H. Goodman, Northampton, tailors, at eleven, at the office of Messrs. Chase and Son, Kingswell-street, Northampton.—Feb. 4, H. Johnson, Sheffield, coachmaker, at eleven, at the Town-hall, Sheffield.—Feb. 5, W. Hill, Cradley, Worcestershire, at eleven, at the Talbot Hotel, Shrewsbury, Worcestershire.—Jan. 20, J. Poodish-wale, Liverpool, at two, at the Commercial Inn, Bolton.—Manchester.—Jan. 20, M. Jacobs, Ender, tailor, at the Half Moon Inn, Ender.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before the 26th of January.

R. M. Moore, Bishopgate-street, oil and colourman.—J. R. Henderson, Davies-street, Berkeley-square, wine-merchant.—D. W. Stephens, Emuworth, Hants, wine-merchant.—J. Greenhill, West Hamfrith, Forest Gate, Essex, farmer.—H. Prior, Lodge-hill, stationer.—G. Newman, Rushall-street, Newwood, wine-merchant.—T. S. Field, Trinity-square, wine and spirit broker.—J. Molony, Broad-street, wine-merchant.—R. Clements, Upper Berkeley-street, West, builder.—J. Jarnall, Air-street, Piccadilly, mill-broker.—W. East, Munster-street, Regent's Park, Coal and corn merchant.

COMMERCIAL INTELLIGENCE.

The Colonial Markets throughout the week have maintained a very animated appearance, a marked improvement in prices has taken place since the last sales. British Plantation Sugars are considered 2s. higher than they were previous to the holidays. There was a very large attendance of the trade, and the future prospect of the market for some time to come is decidedly upwards. The demand for almost every description of West Indian produce was good, and the sales were generally upon a larger scale than for many weeks past.

SUGAR.—There was much interest excited at the opening of the Sugar Market on Tuesday, being the first market day since the 24th ult., the rise in the refined market prepared the trade to expect a further advance in raw sugar; the holders asked prices about 1s. higher than before the holidays, which have been reluctantly given; but as the sales proceeded, the advance became the currency of the market; on investigating the sales with the samples before the holidays, we find the prices of good and fine sugars 1s. to 1s. 6d. higher; and brown sugars fully 1s. 6d. higher; the estimated sales this week are 3600 hhds. including the public sale of Barbadoes, the latter 1200 hhds.; low yellow to fine Barbadoes sold from 6s. 6d. to 6s. 7d., very low brown Demerara sold 6s. 6d. which may be considered the lowest point of the market since good middling Antigua, Granada, and Trinidad were done at 6s. 6d. to 6s. 6d. Mauritius.—The buyers have purchased very freely, and must be quoted at an advance; the sales of the week are 4900 bags, the fine yellow qualities sold from 6s. 6d. to 6s. 6d.; good middling, 6s. 6d. to 6s. 6d.; low brown, 6s. 6d. East India.—The grocers being compelled to pay advanced rates for Bengal, Siam, and Manila, have only purchased just sufficient for their immediate consumption. Refined.—There has been a good business done in the refined market for the grocery descriptions, as well as for shipping goods, and the prices have gradually advanced, making an improvement of 2s. per cwt. Large brown lumps 7s. to 8s., small ditto 8s. to 8s. 6d., Prussian ditto 8s. to 8s. 6d., powder loaves 8s. to 8s. 6d. Hambro ditto 8s. to 8s. 6d., double refined 9s. to 10s. 6d. fine green brands continue to sell readily from 6s. 6d. to 6s. 6d.; Refined Molasses 5s. to 5s. 6d.; inferior 18s. to 19s.; patent ditto 22s. The demand for West India continues good, and advanced rates have again been obtained. P. B. West India 28s. to 30s. The stock of West India Sugar is now 22,400 hhds. being 14,700 less than last year. The stock of Mauritius is now 24,500 bags, which is 19,670 bags less than last year. The delivery of West India last week was 2,028 hhds. which is 19 more than last year. The delivery of Mauritius is 2,571 bags, being 680 more than the corresponding week of 1835.

COFFEES.—A steady business has been done this week in the coffee market, and fully former rates obtained, the clean descriptions of British Plantation, which are scarce, have been repeatedly required after. For the fine qualities of Jamaica, Demerara, and Berbice, there has been a good demand at a trifling advance. East India is firm in price, but little doing; for Ceylon rather better prices were obtained than at the last sales. Dominica and St. Lucia, fine and good, 10s. to 11s.; good middling ditto, 9s. to 10s.; Triage, 8s. to 9s.; Demerara and Berbice, fine and good, 10s. to 11s.; good middling ditto, 9s. to 10s.; fine ordinary ditto, 8s. to 9s.; broken ditto, 7s. to 8s.; fine Jamaica, 11s. to 12s.; good middling ditto, 10s. to 11s.; fine ordinary, 9s. to 10s.; good ordinary, 8s. to 9s.; ordinary Triage, 8s. to 9s.

CHICORY.—The quotation for this article is 18s.; subject to 6d. per lb. duty. It would be worth while to enquire how it is possible to import it from Holland for 2s. per cwt.; the dealers and growers of a superior article to imitate chicory no doubt could enlighten us upon this subject; the public should be made acquainted that 400 tons of this trash has been consumed in Great Britain during the last year; there is no consumption for it, except for the purpose of mixing with coffee, and class which are designated the cutting men; the public have it in their power to check the consumption of chicory, by buying their coffee whole.

TEAS.—The demand for ordinary and fine Congow has been very considerable, and may be quoted at a premium of 1d. to 1d. 1/2 upon the sale cost; Pekoe, Cam-pul, and Souchong, are a shade higher in price; one Twankay, Hyson, and Gun-powders, have not maintained the late advance, in consequence of the declaration for the 19th instant being unusually large in those descriptions of tea; the low sort of black and green teas are heavy of sale, and difficult to dispose of.

FRUIT.—The demand continues to be very moderate; in prices there is scarcely any variation. Several parcels of Currants and Myrtina Raisins have arrived since the 1st; the demand for Fancy Raisins has been rather more general. New Puffed Turkey Eggs 40s. to 45s.; French Plums 60s. to 65s.; Imperial Carbons 8s. to 10s. 10s.; New Prunes 2s. to 2s. 6d.; Mascalline in layers 90s. to 110s.; Bloom Raisins 70s.; Sultanias 40s. to 50s.; Carabanas 40s. to 50s.; Finest New Valentia 40s. to 50s.; Zant Currants 40s. to 50s.; Finest New Prunes ditto 50s.; Jordan Almonds 15s. 15s.; New Valentia ditto 40s.; Barbary ditto 40s. 6d. per cwt.

HOPS.—There has been a very brisk demand at fully, and in some instances at better prices than were obtained last year; the following is the present current price: Kent Pockets 70s. to 80s.; fine 80s. to 90s.; choice middling Kent 100s. to 140s.; Kent Bags 75s. to 80s.; choice ditto 90s. to 110s.; Sussex Pockets 55s. to 75s.; fine ditto 80s. to 90s.

TALLOW.—The prices on the spot have given 3d. to 6d. per cwt., and the demand from the trade has been very moderate. For delivery there has been scarcely any thing doing, and there are sellers at reduced rates.

Liverpool, Jan. 6, 1836.—COTTON. The stock was taken here on the first, and proved 10,000 more bales than had been estimated in America, but 8000 less in Brazil. It comprised 194,700 bales as follows:—Sea Islands, 3,300; Bowdies, 47,900; Tennessee, 17,150; New Orleans, 37,900; total American, 96,340. Pernambuco, 10,670; Bahia, 12,640; Maranhao, 10,100; Para, 100; total Brazil, 33,570. Peruvian, 300; Demerara, 200; Barbadoes, 400; Common West India, 4,400; Carthagena, 430; total West India, 4,940; Egyptian, 18,300. Surats, 27,010; Bengal, 4,800; total East India, 31,810. The sales since the result was published, are about 15,000 bales without further advance in price. Fair sales are at 9d.; Egyptian, 11d.; Surats, 6d. The total imports into Liverpool in 1835, amounted to 97,139 bales, namely, 795,932 American; 142,310 Brazil; 21,340 West India; 35,900 Egyptian; and 62,550 East India. The total export from this port has been 62,400; namely, 45,000 American; 400 Brazil; 300 West India; 450 Egyptian; and 15,700 East India. The total delivery for consumption has been 80,833, viz.—671,500 American; 118,300 Brazil; 21,340 West India; 18,100 Egyptian; and 39,170 East India.

GRAIN in the last.—For daily arrival returns, read "usual annual returns," and for "easy shipments," read "early shipments."

Business is recovering; the corn trade is becoming brisk, with a fair demand by both speculators and millers. At Tuesday's market, Wheat was 2s. a bushel dealer, and Flour 6d. to 1s. a sack.

CORN EXCHANGE, LONDON, JAN. 8.

The arrival of WHEAT and FLOUR this week has been very moderate, and the Meal trade is firm, on quite as good terms as on Monday. In BARLEY, BEANS, and PEAS, we do not note any alteration in value. OATS, of which the supply is limited, fully support Monday's prices. In other articles no alteration.

Wheat... p. Qr. 32s. to 47s. 1/2. Malt... p. Qr. 30s. to 40s. Oats... p. Qr. 16s. to 26s. 1/2. Beans... p. 30s. to 34s. Peas... p. 31s. to 35s. Barley... p. 24s. to 32s. Beans... p. 30s. to 36s. Pollard... p. 14s. to 20s. Linseed... p. 11s. to 12s. 1/2. Mustard... p. 10s. to 12s. 1/2. Rape-seed... p. 10s. to 12s. 1/2. Ditto... p. 10s. to 12s. 1/2. Caraway Seed... p. 10s. to 12s. 1/2. Tares, new winter... p. 3d. to 5d. per bushel. Town-made... p. 30s. to 35s. Essex & Suffolk, on board... p. 30s. to 35s. Seconds... p. 25s. to 30s. Norfolk and Stockton... p. 30s. to 35s.

AVERAGE PRICE OF GRAIN, per Quarter.
Wheat... 47s. 4d. to 48s. 7d. Rye... 27s. 4d. to 28s. 4d. Peas... 31s. 4d. to 32s. 4d. Barley... 24s. 1d. to 25s. 1d. Beans... 30s. 4d. to 31s. 4d. Pollard... 14s. 1d. to 15s. 1d. Linseed... 11s. 1d. to 12s. 1d. Mustard... 10s. 1d. to 11s. 1d. Rape-seed... 10s. 1d. to 11s. 1d. Ditto... 10s. 1d. to 11s. 1d. Caraway Seed... 10s. 1d. to 11s. 1d. Tares, new winter... 3d. to 5d. per bushel. Town-made... 30s. to 35s. Essex & Suffolk, on board... 30s. to 35s. Seconds... 25s. to 30s. Norfolk and Stockton... 30s. to 35s.

AGGREGATE AVERAGE FOR THE LAST SIX WEEKS.
Wheat... 47s. 4d. to 48s. 7d. Rye... 27s. 4d. to 28s. 4d. Peas... 31s. 4d. to 32s. 4d. Barley... 24s. 1d. to 25s. 1d. Beans... 30s. 4d. to 31s. 4d. Pollard... 14s. 1d. to 15s. 1d. Linseed... 11s. 1d. to 12s. 1d. Mustard... 10s. 1d. to 11s. 1d. Rape-seed... 10s. 1d. to 11s. 1d. Ditto... 10s. 1d. to 11s. 1d. Caraway Seed... 10s. 1d. to 11s. 1d. Tares, new winter... 3d. to 5d. per bushel. Town-made... 30s. to 35s. Essex & Suffolk, on board... 30s. to 35s. Seconds... 25s. to 30s. Norfolk and Stockton... 30s. to 35s.

DUTY ON FOREIGN CORN.
Wheat... 10s. 1d. to 11s. 1d. Rye... 8s. 1d. to 9s. 1d. Peas... 7s. 1d. to 8s. 1d. Barley... 6s. 1d. to 7s. 1d. Beans... 5s. 1d. to 6s. 1d. Pollard... 4s. 1d. to 5s. 1d. Linseed... 3s. 1d. to 4s. 1d. Mustard... 2s. 1d. to 3s. 1d. Rape-seed... 2s. 1d. to 3s. 1d. Ditto... 2s. 1d. to 3s. 1d. Caraway Seed... 2s. 1d. to 3s. 1d. Tares, new winter... 1d. to 2d. per bushel. Town-made... 25s. to 30s. Essex & Suffolk, on board... 25s. to 30s. Seconds... 20s. to 25s. Norfolk and Stockton... 25s. to 30s.

ARRIVALS OF GRAIN LAST WEEK.
Wheat... 100,000 bushels. Rye... 50,000 bushels. Peas... 20,000 bushels. Barley... 30,000 bushels. Beans... 10,000 bushels. Pollard... 5,000 bushels. Linseed... 2,000 bushels. Mustard... 1,000 bushels. Rape-seed... 1,000 bushels. Ditto... 1,000 bushels. Caraway Seed... 1,000 bushels. Tares, new winter... 500 bushels. Town-made... 10,000 bushels. Essex & Suffolk, on board... 10,000 bushels. Seconds... 5,000 bushels. Norfolk and Stockton... 10,000 bushels.

Quarters of Bonded Corn in the United Kingdom, Dec. 5.
Wheat... 600,000 bushels. Rye... 300,000 bushels. Peas... 100,000 bushels. Barley... 200,000 bushels. Beans... 50,000 bushels. Pollard... 25,000 bushels. Linseed... 10,000 bushels. Mustard... 5,000 bushels. Rape-seed... 5,000 bushels. Ditto... 5,000 bushels. Caraway Seed... 5,000 bushels. Tares, new winter... 2,500 bushels. Town-made... 50,000 bushels. Essex & Suffolk, on board... 50,000 bushels. Seconds... 25,000 bushels. Norfolk and Stockton... 50,000 bushels.

SMITHFIELD, FRIDAY, JAN. 8.
We have an extremely limited supply of everything this morning, which has given a general briskness to trade. Beef consequently fully maintains Monday's advance to 4s. 4d. while Veal, for nice delicate qualities, has extended that day's quotation by 1d. 1/2. 4d. being the present figure for such descriptions. Mutton, too, if anything, has recovered a little in value, though we keep the top figure at its former reduction—4s. In Pork there is an apparent variation, saleable sorts realising full as good terms as before.

To sink the offal per stone of 8 lbs.
Beef... 3s. 6d. to 4s. 6d. Veal... 4s. 6d. to 5s. 6d. Mutton... 4s. 6d. to 5s. 6d. Pork... 4s. 6d. to 5s. 6d. Butter... 4s. 6d. to 5s. 6d. Cheese... 4s. 6d. to 5s. 6d. Eggs... 4s. 6d. to 5s. 6d. Lard... 4s. 6d. to 5s. 6d. Tallow... 4s. 6d. to 5s. 6d. Soap... 4s. 6d. to 5s. 6d. Candles... 4s. 6d. to 5s. 6d. Oil... 4s. 6d. to 5s. 6d. Sugar... 4s. 6d. to 5s. 6d. Tea... 4s. 6d. to 5s. 6d. Coffee... 4s. 6d. to 5s. 6d. Spices... 4s. 6d. to 5s. 6d. Herbs... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Vegetables... 4s. 6d. to 5s. 6d. Grains... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s. 6d. to 5s. 6d. Minerals... 4s. 6d. to 5s. 6d. Metals... 4s. 6d. to 5s. 6d. Stones... 4s. 6d. to 5s. 6d. Woods... 4s. 6d. to 5s. 6d. Barks... 4s. 6d. to 5s. 6d. Roots... 4s. 6d. to 5s. 6d. Leaves... 4s. 6d. to 5s. 6d. Flowers... 4s. 6d. to 5s. 6d. Fruits... 4s. 6d. to 5s. 6d. Seeds... 4s. 6d. to 5s. 6d. Flours... 4s. 6d. to 5s. 6d. Starches... 4s. 6d. to 5s. 6d. Gums... 4s. 6d. to 5s. 6d. Resins... 4s. 6d. to 5s. 6d. Oils... 4s. 6d. to 5s. 6d. Acids... 4s. 6d. to 5s. 6d. Salts... 4s

